SERVICE MANUAL

ZENITH®

HIGH FIDELITY

1958 PORTABLE, CONSOLETTE AND RADIO HIGH FIDELITY MODELS

ZENITH RADIO CORPORATION
6001 DICKENS AVENUE • CHICAGO 39, ILLINOIS

HF-

GENERAL

The Hi-Fidelity record players and AM-FM phonographs listed in this manual are equipped with two different type record changers. Some table units have single and some have push-pull audio output stages with 3 1/2 watts of undistorted power. The next larger group have push-pull audio output with 11 watts of power output. The largest Hi-Fi console units have push-pull audio output with 22 watts of undistorted power. As a result of style and cabinetry, the acoustic baffles for these speakers vary from vented enclosures, open back cabinets, to completely sealed enclosures. Cabinet styling is quite complete. These Hi-Fidelity units are supplied in 27 different models providing a broad cabinet style range to fit any home.

COBRA-MATIC RECORD CHANGER

Models HF10, HF11, HF16, HF17, HF20, HF21, HF1183, HF1185 use the Cobra-Matic 4 Speed Record Changer. This changer will automatically play a stack of twelve 10" records, ten 12" records or fourteen 7" records. It will also intermix any ten 12" and 10" records of the same speed. The tone arm in this changer has a stylus selector lever which will change from either 1 mil or 3 mil stylus by rotating the stylus selector lever down under the tone arm in an arc of 180 degrees. This record changer will accomodate either 142-80 cartridge which has a 1 and 3 mil sapphire stylus or a 142-83 cartridge with a 1 mil diamond and a 3 mil sapphire stylus.

SPEED TOLERANCE

The normal speed tolerances on this changer are as follows:

	Low Limit	High Limit
16 2/3 - Slow speed	16.66	17.30
33 1/3	33.33	34.61
45 RPM	45	46.75
78 RPM	78.26	81.81

45 RPM OPERATION (COBRA-MATIC)

45 RPM records can be used with the changer either by using inserts or the 45 RPM spindle, (part #S-24231) included with these models. Installation of this spindle is quite simple. All that is necessary is to point the arrow to the back of the changer and firmly press it down over the small diameter spindle.

AUTOMATIC STOP (COBRA-MATIC)

This changer also has an automatic stop feature after the last record has been played. It will turn off both the changer and amplifier on all units having only a record player and amplifier. All that is necessary to cause both changer and amplifier to again operate is to move the On-Off switch to On position.

FLOATING THE CHANGER (COBRA-MATIC)

Be certain that the two record changer mounting bolts are turned clockwise until the changer floats freely on its mounting springs. Also remove the cardboard strips from under the sides of the record changer. Floating of the changer is extremely important if you are to avoid any possibility of microphonism as a result of mechanical vibrations from the cabinet feeding back up through the record changer mounting and causing the tone arm and/or cartridge to be modulated. In the event it is necessary to transport any of these units, be certain to reverse the procedure and immobilize the changer. Also immobilize the tone arm by snapping it over the tone arm rest to prevent any possibility of damage to the tone arm or stylus.

CUSTOM COBRA-MATIC RECORD CHANGER

Models HF1284, HF1286, HF1290 and HF1292 use the Custom Cobra-Matic record changer with Stroboscope. These units will automatically play a stack of ten 10" records, ten 12" records or ten 7" records.

The tone arm in the changer has a cartridge lever which can be moved to either 78 or LP position. This record changer will accomodate either a 142-77 cartridge which has a 1 mil and 3 mil sapphire stylus or a 142-76 cartridge with a 1 mil diamond and a 3 mil sapphire stylus.

With the Stroboscope feature on this changer, it is possible for the turntable to be adjusted to the exact RPM of the record as recorded. When the line of bars opposite the RPM number indicating the desired speed is stopped, the record changer turntable is rotating at the desired speed, thus providing perfect pitch and tempo of the original selection.

45 RPM OPERATION (CUSTOM COBRA-MATIC)

45 RPM records can be used with this changer either by using inserts or the 45 RPM spindle, part #S-22006 included with these models. Installation of this spindle is quite simple. It is only necessary to line up the point of the bottom of the crest with the center of the Strob window, then completely depress the pressure plate with the index finger and thread the 45 RPM spindle over the small diameter spindle of the record changer. When the 45 RPM spindle is firmly seated over the small diameter spindle, with the emblem lined up properly pointing at the center of the Strob window, the pressure plate can be released. The 45 RPM spindle can be removed from the record changer by completely depressing the pressure plate, lifting and aggitating the spindle.

FLOATING THE CHANGER (CUSTOM COBRA-MATIC)

Be certain the record changer mounting bolts are turned clockwise until the changer floats freely on its mounting springs. Floating of the changer is extremely important to avoid any possibility of microphonism as the result of mechanical vibrations from the cabinet feeding back up thru the record changer mounting and causing the tone arm and/or cartridge to be modulated.

In the event it is necessary for you to transport any of these units, be certain to reverse the procedure and immobilize the changer. Also immobilize the tone arm and record pressure arm by fastening them firmly to the spindle with tape or a rubber band.

WOOFER SPEAKERS

Models HF10, HF11, and HF16 use a 7 1/2" permanent magnet type woofer speaker.

Models HF17, HF20, HF21, HF774, HF1183, HF1185 and HF1284 use 12" permanent magnet woofer speakers.

ELECTROSTATIC TWEETERS

All of these models use two electrostatic tweeter speakers. These electrostatic speakers are constructed and operate in the following manner:

They are essentially two pieces of metal with an insulating mylar film between them. The negative plate is perforated with a multitude of tiny holes. The aluminum which is vacuum plated on the mylar insulating material, is the positive plate. These three materials are sandwiched together, the mylar being the middle material. With the aluminum plate being positive and the other metal plate being negative, these two plates have an electrostatic attraction for each other. This electrostatic attraction which exhibits itself in the physical sense by causing the plates to come as close together as possible, enables us to control the sensitivity of these electrostatic speakers.

On the smaller table model units the DC voltage across these two plates is approximately 120 volts. On the larger console receivers, we have as high as 350 volts DC impressed across them. This of course makes them adhere more closely. This results in increased sensitivity. However, there is a limit to sensitivity increase versus DC voltage.

What we now have is an infinite group of high frequency sound reproducers, each hole being a sound reproducer opening with the mylar film at the back of the hole acting as a cone to move air. We now supply a varying AC audio voltage to these plates. The greater the AC voltage, the more output the speakers have. On the positive half cycle, we add to the DC voltage already impressed and increase the attraction between the two causing the aluminum to move closer to the opposite plate; this in turn causes the mylar to move which in turn moves air and creates sound. On the negative half cycle, we subtract voltages and mylar movement occurs again producing air movement. By virtue of their minute cone diameters, a sound reproducer of this type can logically only be sensitive to the higher frequencies.

SPEAKERS HF1290-HF1292

These models have a conventional permanent magnet type woofer speaker with a 2 lb. magnet, a 7 1/2" mid-range-tweeter speaker and two cone permanent magnet type tweeters. The 7 1/2" mid-range-tweeter speaker is mounted in the cabinet in a position to flood the center listening area with frequencies of not less than 1,000 cycles and on up to 15,000 cycles. The reactance of the 3 mfd non-polarized condenser in series with the 7 1/2" mid-range-tweeter is such that it will not pass frequencies below 1,000 cycles. This plus the natural 800 cycle resonance of the cone, eliminates the possibility of the speaker responding at frequencies lower than 1,000 cycles.

CONE TWEETERS HF1290-HF1292

The two 3 1/2" cone type tweeter speakers are mounted in the cabinet at angles in such a manner that they will help to aid the high frequency coverage of the mid-range-tweeter speaker throughout the room. The reactance of the 3 mfd non-polarized capacitor in series with these two speakers plus their normal cone resonance of 3,000 cycles prohibits them from responding to frequencies any lower than this. However, they do reproduce frequencies on up to 15,000 cycles.

SPEAKER ENCLOSURE

The sealed speaker enclosure is used as an air cushion which mechanically damps the speaker system to greatly minimize the tonal hangover by achieving a cleaner more natural bass response. This enclosure also contains thick sound absorbing material which reduces objectionable resonance and prevents cancellation of tones by reflection. The size of this speaker enclosure is 8500 cubic inches.

REMOTE SPEAKER HF1290-HF1292

Chassis 12Z21 is equipped to accomodate a remote speaker unit, part #RS2000. This remote speaker unit contains one 12" speaker with a voice coil impedance of 3.2 ohms at 400 cycles and one 5 1/4" mid-range-tweeter speaker with a voice coil impedance of 16 ohms. The 5 1/4" speaker has a 3 mfd frequency limiting condenser in series with it. The condenser and 5 1/4" speaker are then shunted across the 12" woofer.

There is an auto transformer with this unit to enable the user to adjust the remote unit to the desired volume level. The auto transformer has three taps; 3 - 4 ohms, 6 - 8 ohms and 16 ohms. The speakers in the remote unit are connected across the 3 - 4 ohm tap.

FM OSCILLATION RADIATION

Since FM receivers have been interfering with other services, the Federal Communications Commission, has decreed that oscillation radiation be suppressed below specific limits.

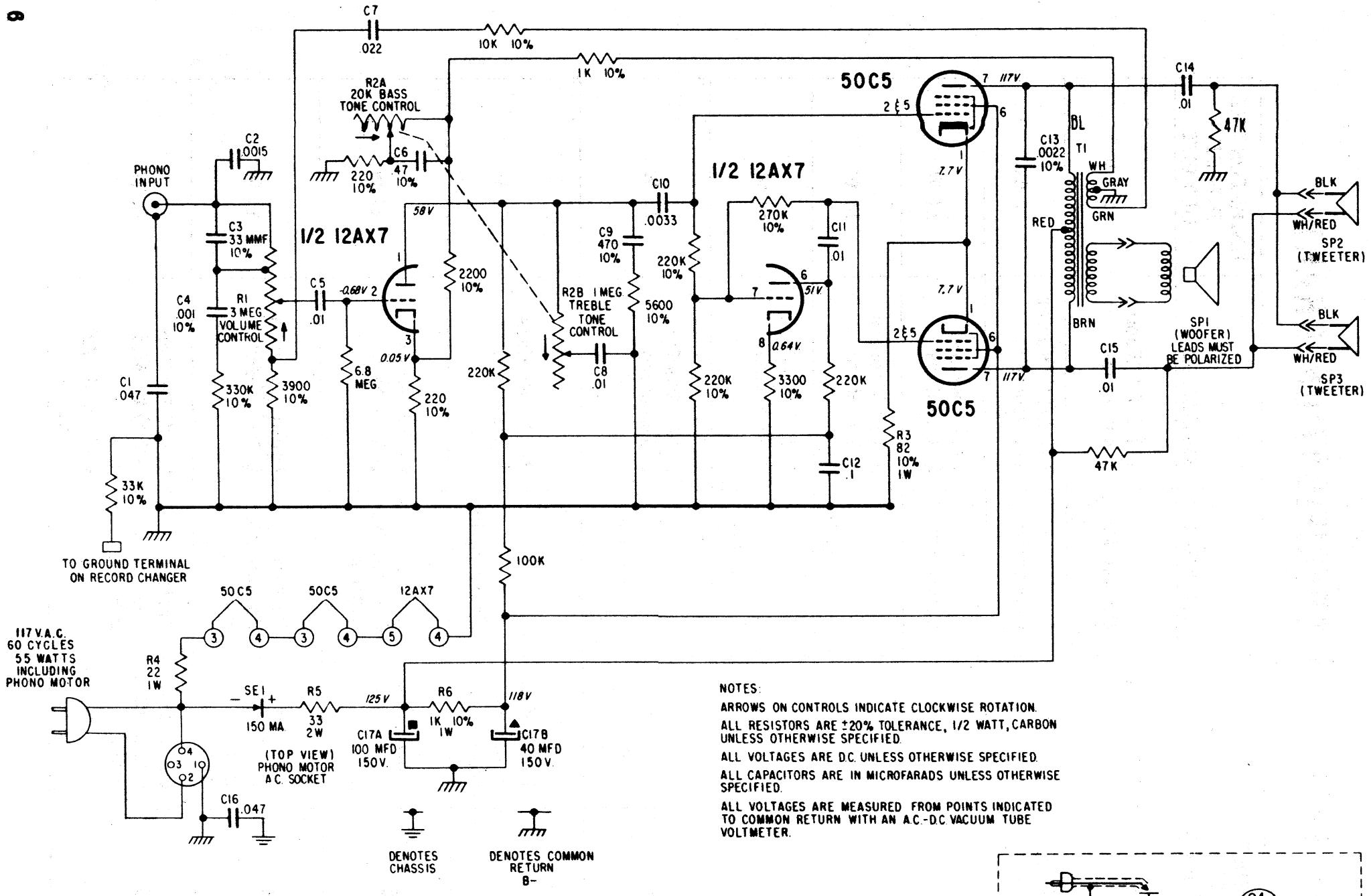
On the 12Z21 chassis the FM oscillator has been completely isolated from the remainder of the chassis to reduce oscillator radiation to the desired level. All the leads going to other points from the FM oscillator section pass out of the oscillator shield thru the feed-thru type capacitors. This is similar to standard procedure for TV tuners and serves to contain the radiation within the oscillator unit. On Models 11Z20Z and 12Z20 other steps have been taken to minimize oscillator radiation within limits specified by the Federal Communications Commission.

INDEX and SPECIFICATION CHART

MODEL	CHASSIS	TYPE	SCHEMATIC PAGE	TUBE LAYOUT PAGE	CHASSIS PARTS LIST PAGE
HF10G HF10W HF11L HF11F	3Z04 3A04	Portable High Fidelity	6	7	17
HF16R HF16E	3A03	Consolette High Fidelity	8	7	18
HF17R HF17E HF17H	5Z21	Consolette High Fidelity	9	10	19
HF20R HF21E	5Z21	Console High Fidelity	9	10	19
HF774R HF774E HF774H	7Z20	Console AM Radio High Fidelity	11	12	21
HF1183E	11Z20Z	Console AM-FM Radio High Fidelity	13	14	23
HF1185R HF1185M	11Z20Z	Console AM-FM Radio High Fidelity	13	14	23
HF1284 HF1284E HF1284G HF1284L HF1284Y	12Z20	Console AM-FM Radio High Fidelity	13	14	23
HF1286R	12Z20	Console AM-FM Radio High Fidelity	13	14	23
HF1290R HF1290H HF1292 HF1292E	12Z21	Console AM-FM Radio High Fidelity	15	16	27

INDEX and SPECIFICATION CHART

CABINET PARTS LIST PAGE	STYLUS	CHANGER	SPEAKERS	UNDIST ORTED POWER OUT PUT
17	1 & 3 mil. mfg. saph.	Cobramatic	1-7 1/2" Woofer 2-Tweeters	3.5W
19	1 & 3 mil. mfg. saph.	Cobramatic	1-7 1/2" Woofer 2-Tweeters	3.5W
20	1 & 3 mil. mfg. saph.	Cobramatic	1-12" Woofer 2-Tweeters	11 W
20	1 mil. dia. 3 mil.mfg. saph.	Cobramatic	2-12" Woofers 2-Tweeters	11 W
22	1 mi. dia. 3 mil. mfg. saph.	Cobramatic	2-12" Woofers 2-Tweeters	11 W
25	1 mil. dia. 3 mil. mfg. saph.	Cobramatic	2-12" Woofers 2-Tweeters	11 W
25	1 mil. dia. 3 mil. mfg. saph.	Cobramatic	2-12" Woofers 2-Tweeters	11 W
25	1 mil. dia. 3 mil. mfg. saph.	Custom Cobramatic w/Strob	2-12" Woofers 2-Tweeters	11 W
25	1 mil. dia. 3 mil. mfg. saph.	Custom Cobramatic w/Strob	2-12" Woofers 2-Tweeters	11 W
29	1 mil. dia. 3 mil. mfg. saph.	Custom Cobramatic w/Strob	1-12" Woofer 1-7 1/2" Mid-Range 2-Cone 3 1/2" Tweeters	22 W



NOTES:

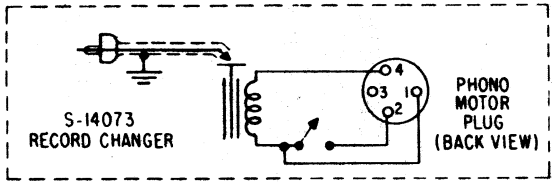
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.

ALL RESISTORS ARE ±20% TOLERANCE, 1/2 WATT, CARBON UNLESS OTHERWISE SPECIFIED.

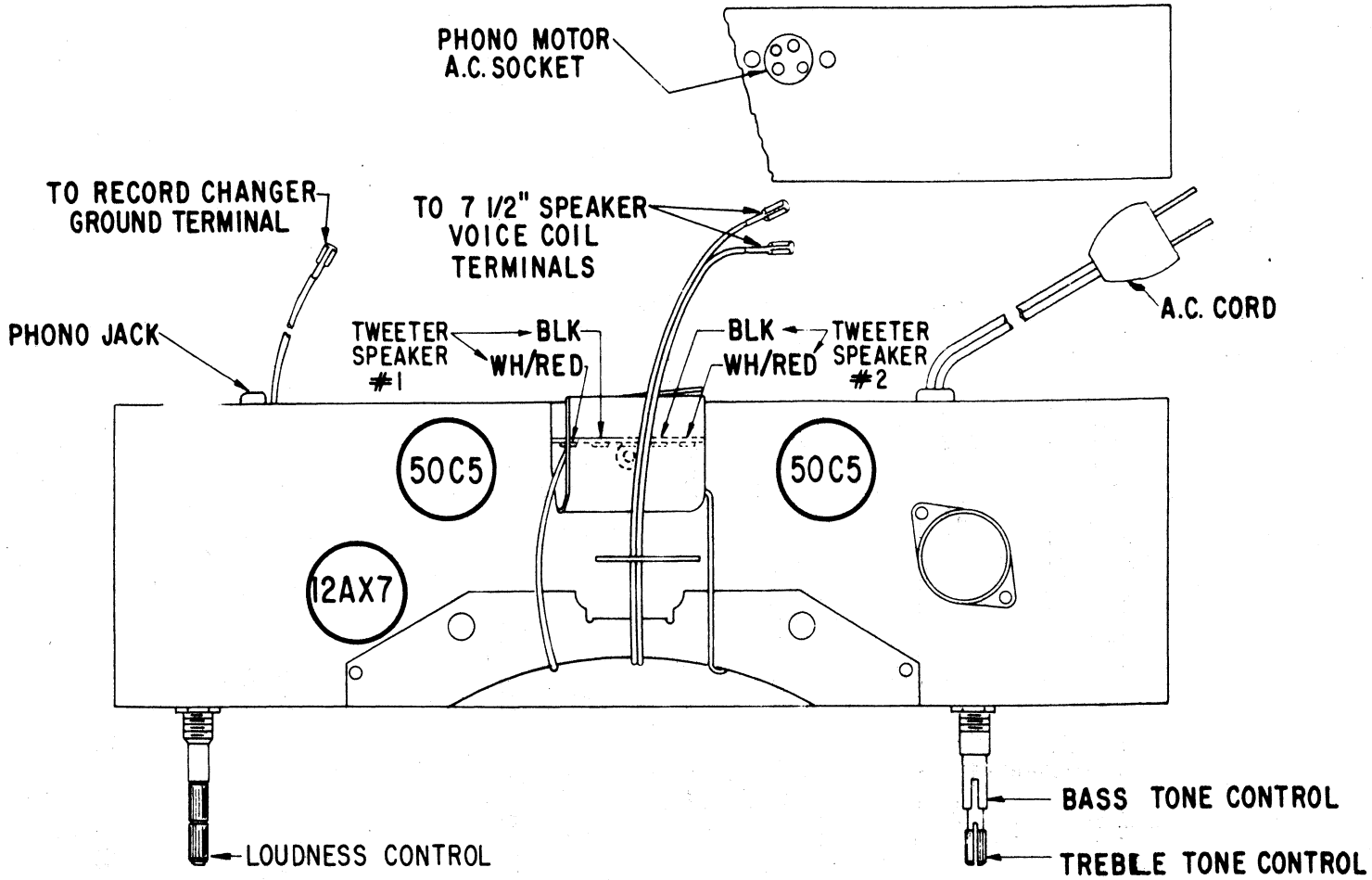
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.

ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

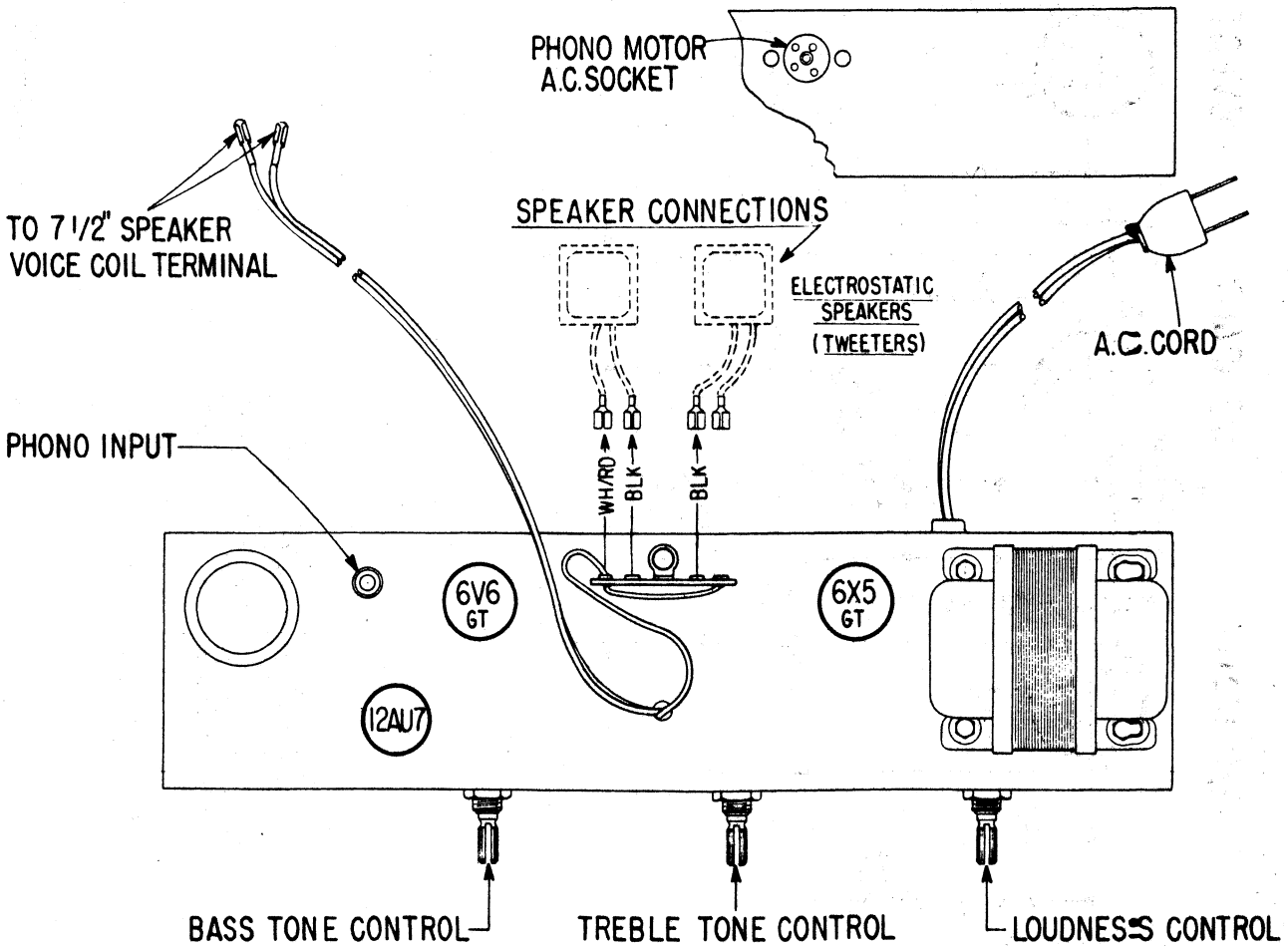
ALL VOLTAGES ARE MEASURED FROM POINTS INDICATED TO COMMON RETURN WITH AN A.C.-D.C. VACUUM TUBE VOLTMETER.



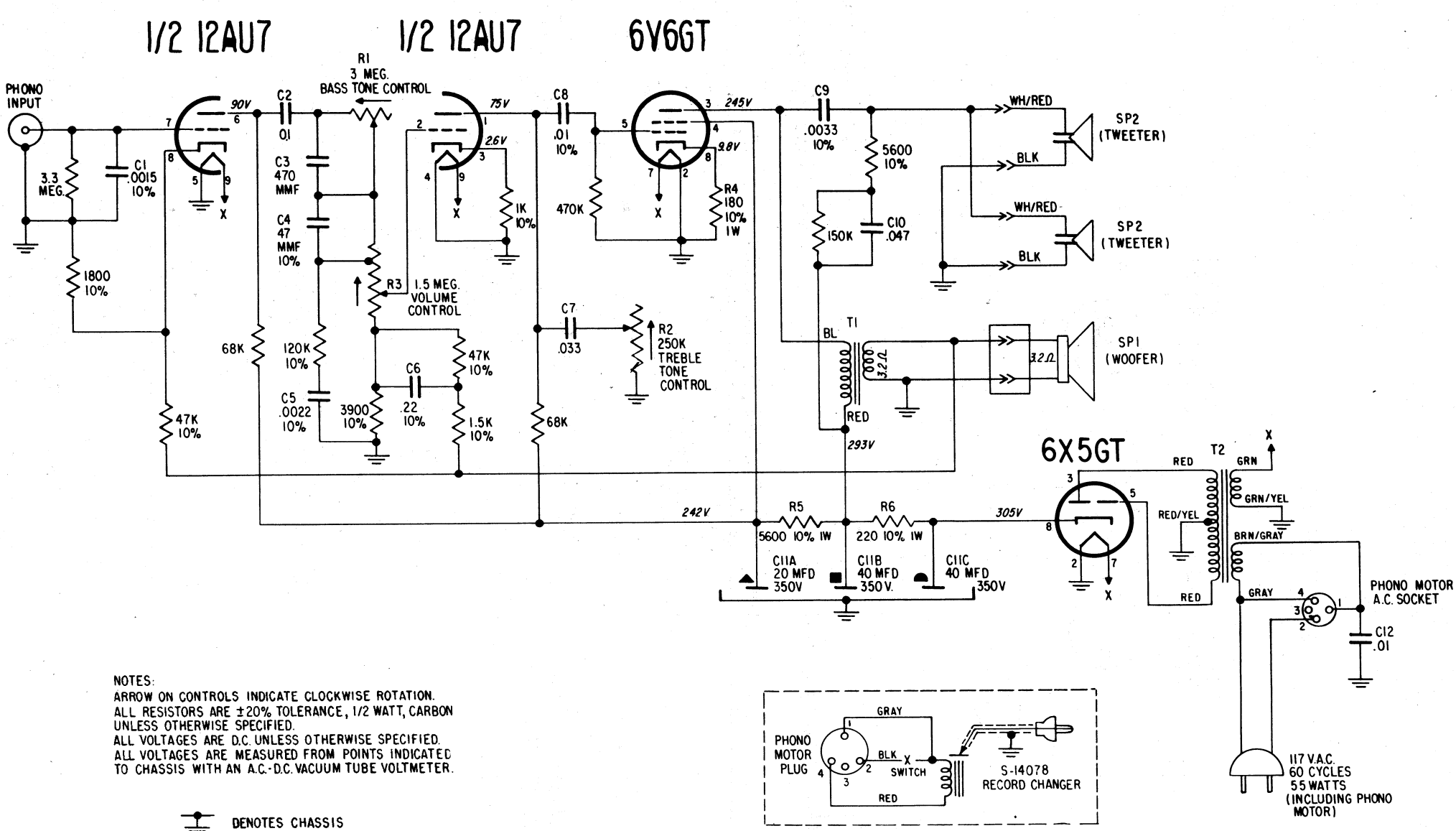
SCHEMATIC CHASSIS 3Z04 - 3A04



TUBE LAYOUT CHASSIS 3Z04-3A04



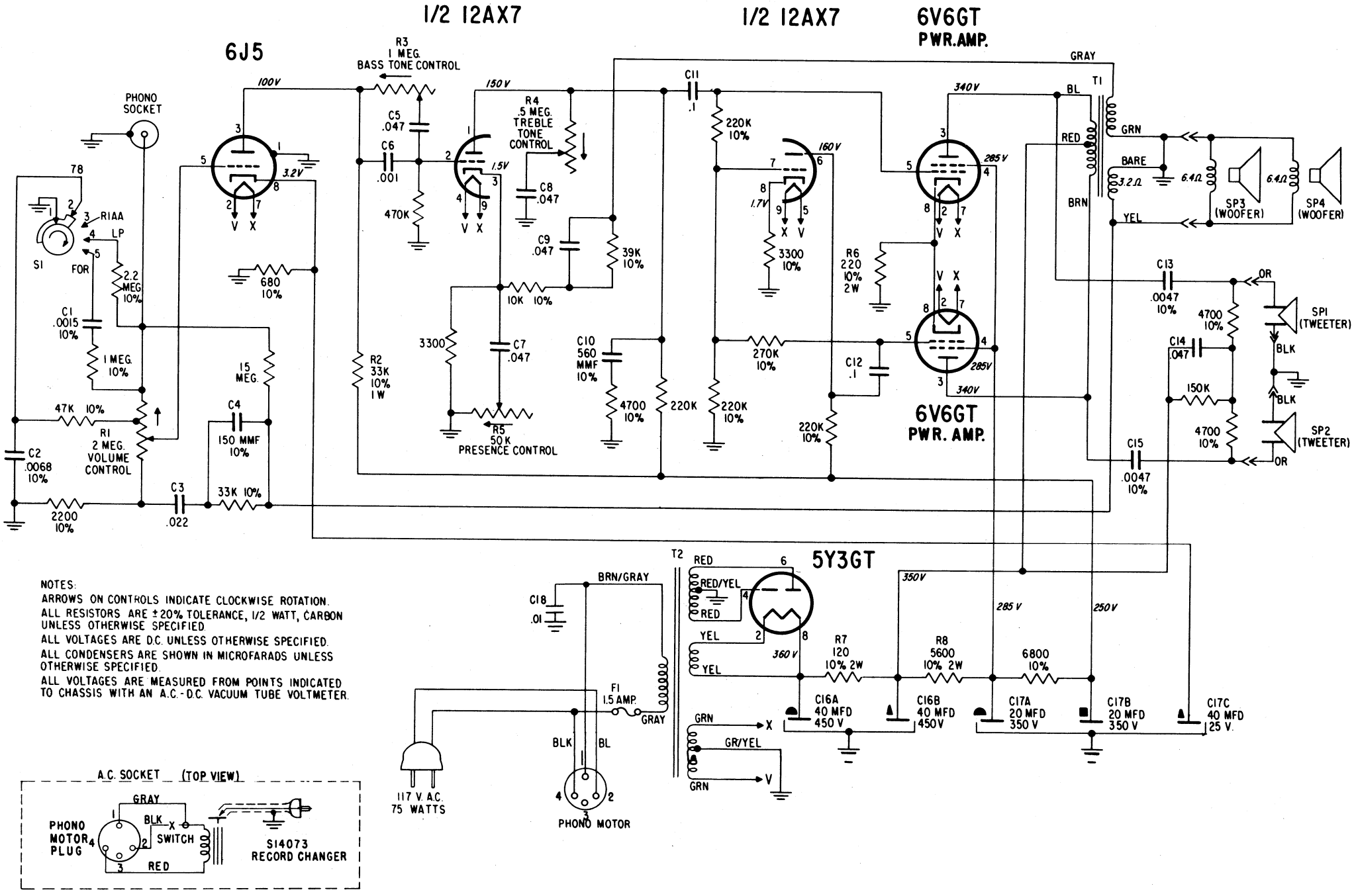
TUBE LAYOUT CHASSIS 3A03



NOTES:
ARROW ON CONTROLS INDICATE CLOCKWISE ROTATION.
ALL RESISTORS ARE ±20% TOLERANCE, 1/2 WATT, CARBON UNLESS OTHERWISE SPECIFIED.
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.
ALL VOLTAGES ARE MEASURED FROM POINTS INDICATED TO CHASSIS WITH AN A.C.-D.C. VACUUM TUBE VOLTMETER.

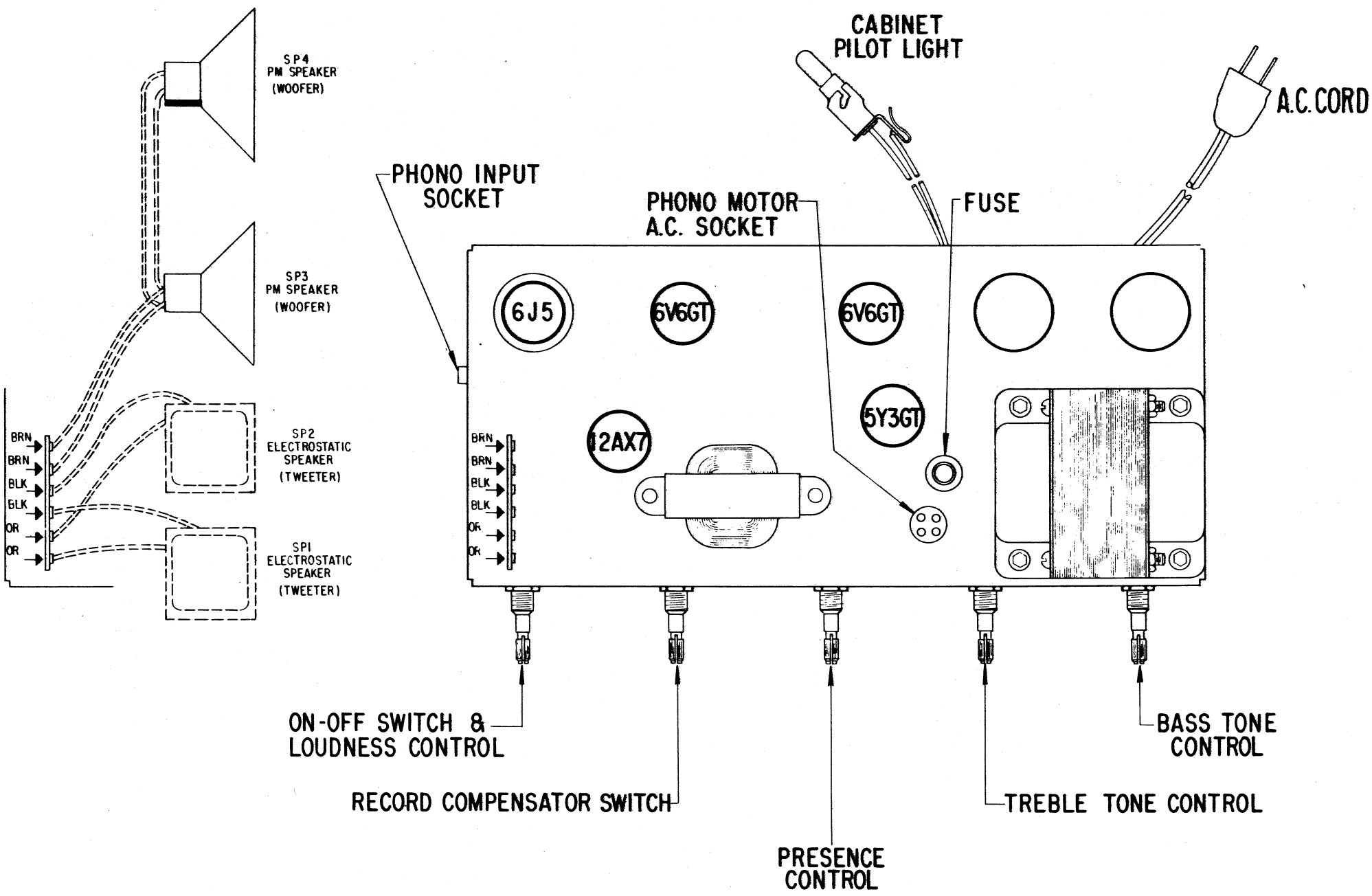
DENOTES CHASSIS

SCHEMATIC CHASSIS 3A03

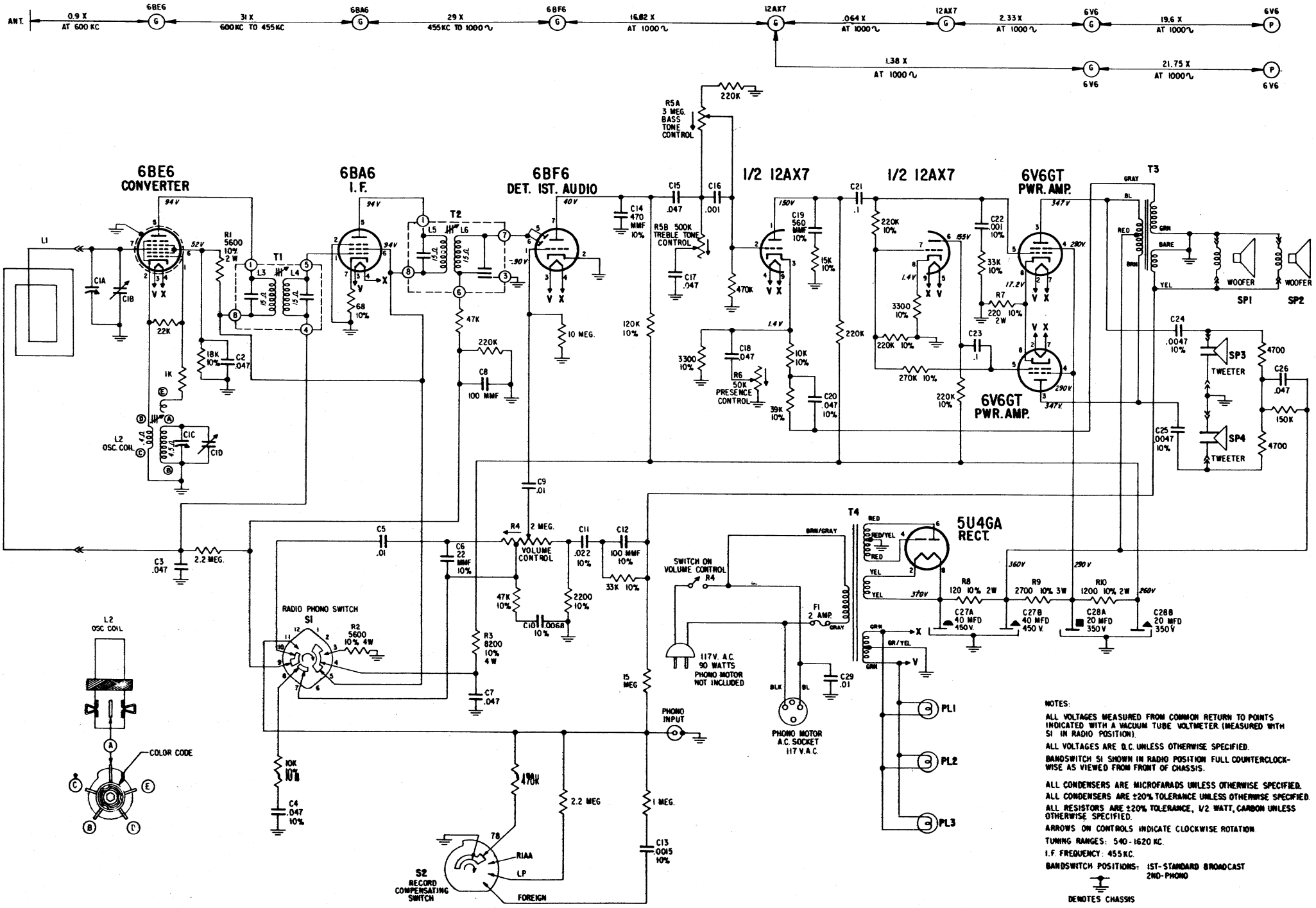


NOTES:
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION.
ALL RESISTORS ARE ±20% TOLERANCE, 1/2 WATT, CARBON UNLESS OTHERWISE SPECIFIED.
ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED.
ALL CONDENSERS ARE SHOWN IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
ALL VOLTAGES ARE MEASURED FROM POINTS INDICATED TO CHASSIS WITH AN A.C.-D.C. VACUUM TUBE VOLTMETER.

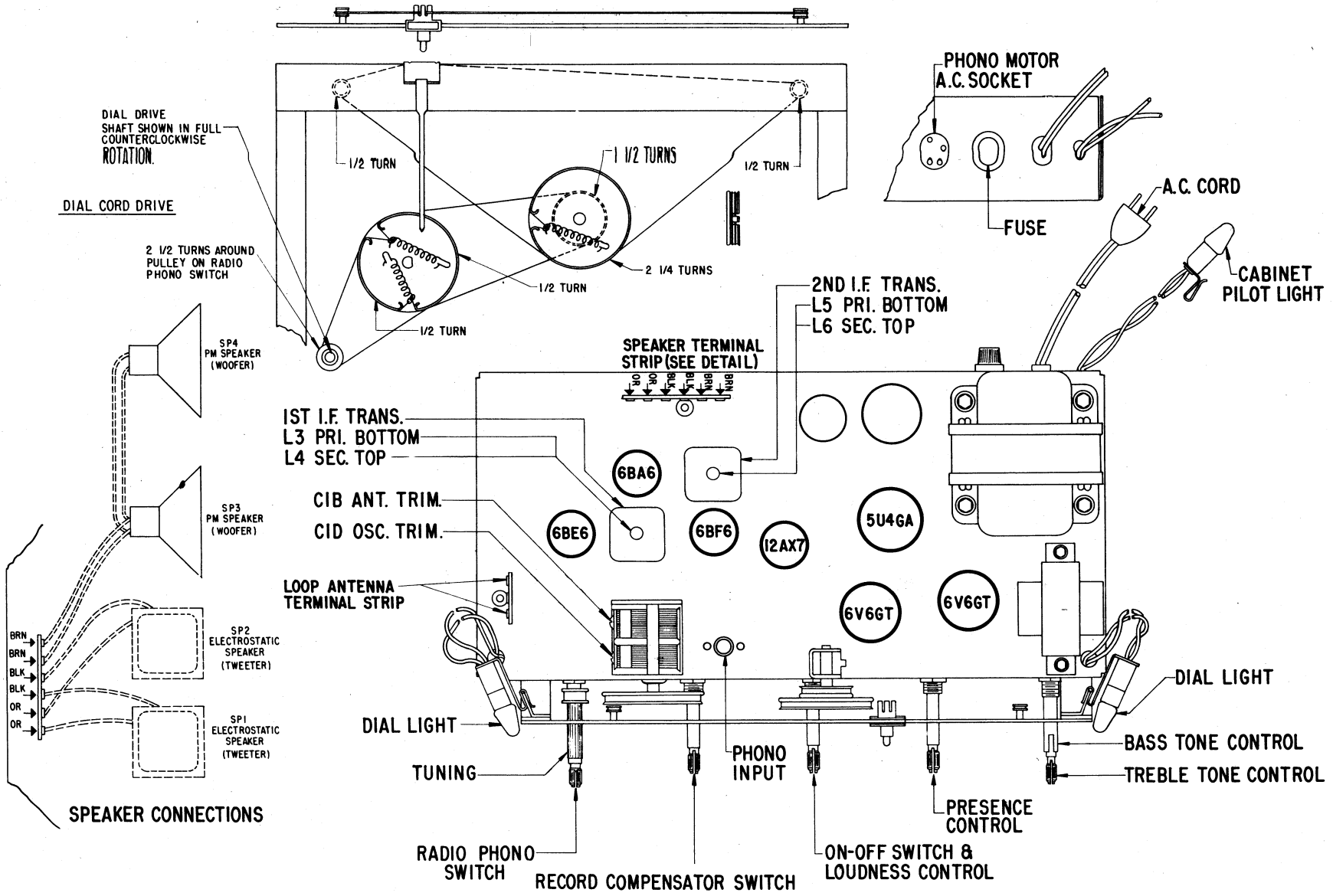
SCHEMATIC CHASSIS 5Z21



TUBE LAYOUT CHASSIS 5Z21



SCHEMATIC CHASSIS 7Z20



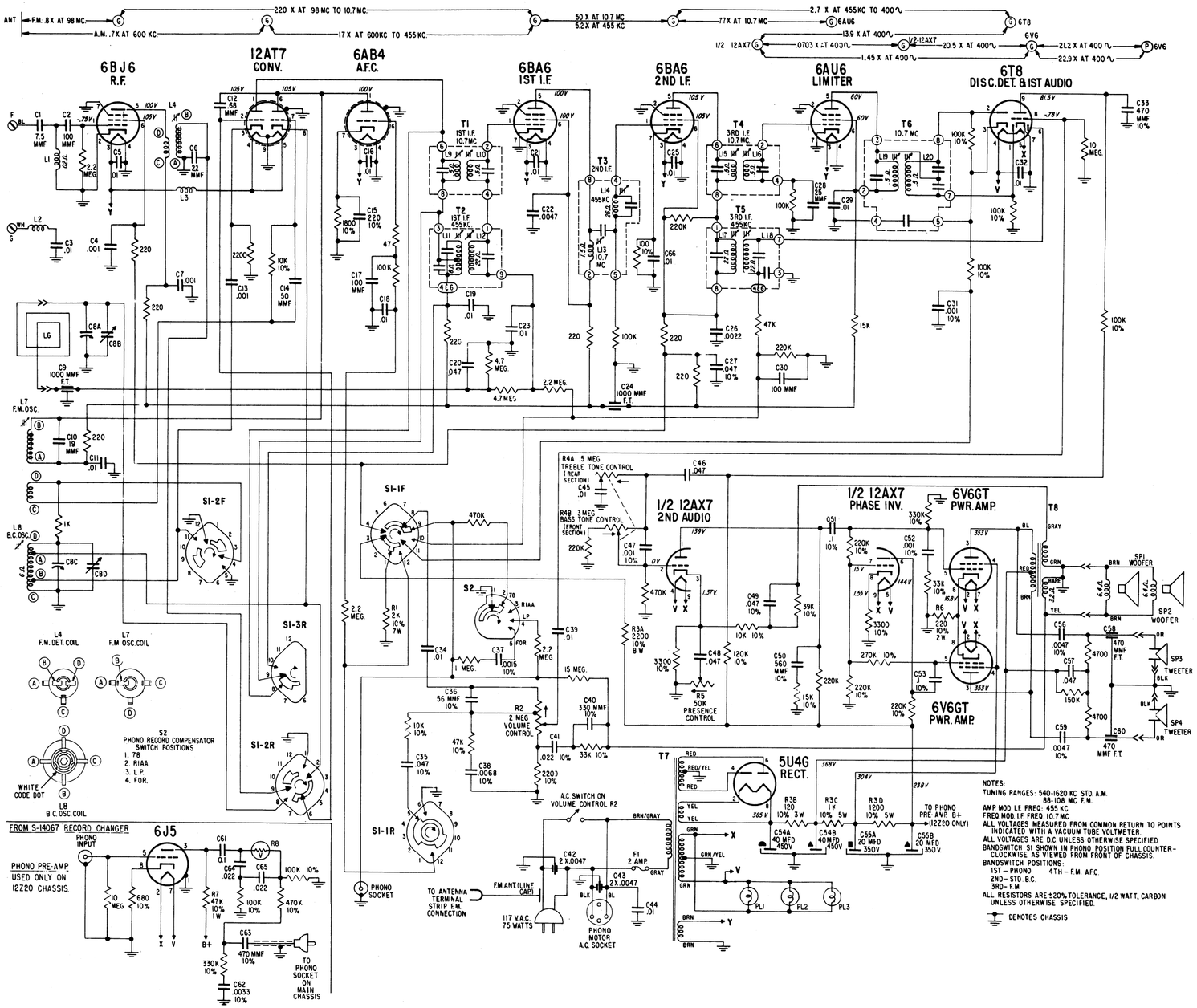
TUBE, TRIMMER LOCATION & ALIGNMENT PROCEDURE CHASSIS 7Z20

ALIGNMENT PROCEDURE

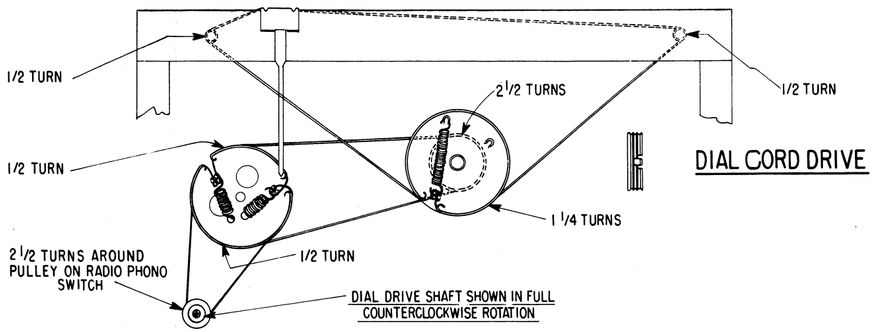
OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIG. FREQUENCY	SET DIAL AT	TRIMMERS	PURPOSE
1	Converter Grid	.5 Mfd.	455 Kc.	600 Kc.	L3, L4, L5, L6	Align I.F. for maximum output
2	One Turn Loop Coupled Loosely to Wave Magnet	—	1600 Kc.	1600 Kc.	C1D	Set Oscillator to Dial Scale.
3		—	1400 Kc.	1400 Kc.	C1B	Align Antenna Stage

I. F. TRANSFORMERS:

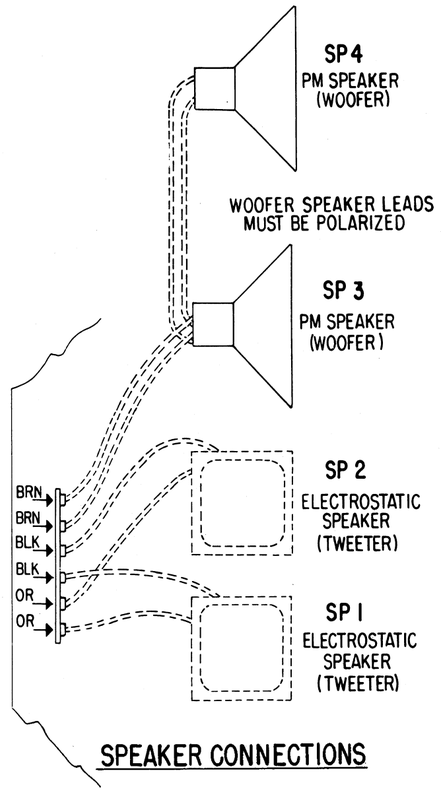
The I.F. transformers incorporated in this receiver are of the new permeability tuned type. The advantage of an I.F. transformer of this type is its extreme stability under various humidity and temperature conditions. The upper coil is the secondary and the lower the primary. When adjusting these I.F. transformers, the tuning wrench 68-26 can be inserted into the top slug, rotated until maximum output is obtained and then dropped down to the lower slug and the same operation repeated. The tuning wrench is so designed that turning one slug does not affect the adjustment of the other.



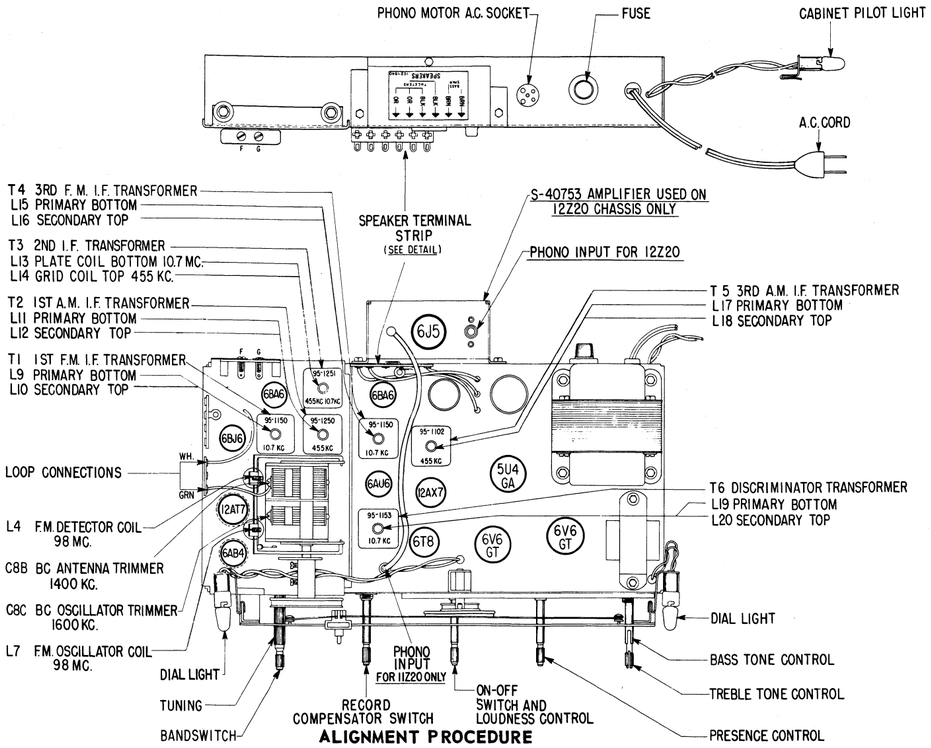
SCHEMATIC CHASSIS 11Z20Z & 12Z20



DIAL CORD DRIVE



SPEAKER CONNECTIONS



ALIGNMENT PROCEDURE

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJ. TRIMMERS	PURPOSE
1	Pin 2 12AT7 Converter	.05 mfd.	455 Kc. Modulated	AM	600 Kc.	L 11, 12, 14, 17 & 18	Align I.F. channel for maximum output.
2	Antenna Post AM	.05 mfd.	1600 Kc. Modulated	AM	1600 Kc.	C8D	Set oscillator to dial scale.
3	Antenna Post AM	.05 mfd.	1400 Kc. Modulated	AM	1400 Kc.	C8B	Align antenna stage.
4	**IMPORTANT:** Before attempting to align the FM portion of this receiver the Band switch should be turned to "FM".						
5 (a)	Pin 1 (grid) on 6AU6 limiter	.05 mfd.	10.7 Mc. Unmodulated	FM		L 19	Align primary of discriminator for maximum reading.
6 (b)	Pin 1 (grid) on 6AU6 limiter	.05 mfd.	10.7 Mc. Unmodulated	FM		L 20	Adjust secondary of discriminator for zero reading.
7 (c)	Pin 1 (grid) on 6BA6 2nd IF	.05 mfd.	10.7 Mc. Unmodulated	FM		L 15, 16	Align 3rd IF transformer for maximum reading.
8 (c)	Pin 1 (grid) on 6BA6 1st IF	.05 mfd.	10.7 Mc. Unmodulated	FM		L 13	Align primary 2nd IF transformer for maximum reading.
9 (c)	Pin 2 on 12AT7 converter	.05 mfd.	10.7 Mc. Unmodulated	FM		L 9, 10	Align 1st. IF transformer for maximum reading.
10 (c)	**REPEAT STEPS 7, 8 & 9**						
11 (c)	Antenna Post FM (Remove line antenna)	270 ohms	98 Mc. Unmodulated	FM	98 Mc.	L 7 Osc. Coil Slug.	Set Oscillator to dial scale.
12 (c) (d)	Antenna Post FM (Remove line antenna)	270 ohms	98 Mc. Unmodulated	FM	98 Mc.	L 4 Det. Coil Slug.	Align det. stage to maximum reading.

TUBE, TRIMMER LOCATION & ALIGNMENT PROCEDURE CHASSIS 11Z20Z & 12Z20

TO THE SERVICE MAN:

The 11Z20Z and 12Z20 chassis incorporate a superheterodyne circuit with two stages of IF, on the FM Band, and two stages on the AM Band. The two chassis are basically identical except the 12Z20 uses a 6J5 pre-amplifier. This is necessary when the custom Cobramatic record changer with stroboscope is used, since we require more amplification for the cartridge used in this unit.

These receivers feature an Automatic Frequency Control on FM, which automatically keeps the oscillator on the exact station frequency when it is tuned to an FM station. Turn the band switch to FM-AFC position and tune the receiver.

When the desired FM station is a weak station, adjacent in frequency to a strong station, the AFC may pull the tuning into the stronger station. Under these conditions, place the band switch in FM position and tune the receiver as instructed under "Frequency Modulation."

FM RF Alignment: The tuning slugs are attached to threaded shafts and the slugs are varied in the field of the coils by turning the shafts clockwise or counter-clockwise. After adjustment the shafts must be secured with a drop of speaker cement.

AM and FM Alignment: The AM and FM IF transformers in these receivers are of the new permeability tuned type. The advantage of an IF transformer of this type is its extreme stability under various humidity and temperature conditions. The upper coil is the secondary and the lower the primary. When adjusting these IF transformers the tuning wrench 68-26 can be inserted into the top slug, rotated until maximum output is obtained and then dropped down to the lower slug and the same operation repeated. The tuning wrench is so designed that turning one slug does not affect the adjustment of the other.

FM IF Alignment: Because of the wide band pass, it is desirable to use a FM signal generator and a cathode ray oscilloscope when aligning the FM IF channel. The instruction book for the Zenith Model 800 Signal Generator (Form Z8001) covers complete FM alignment procedure. If visual alignment equipment is unavailable, reasonably accurate alignment can be made by following the procedure outlined below.

FM Discriminator Alignment: When the secondary of the discriminator is aligned (operation 5) use sufficient signal input to get a good positive and negative indication before setting the slug for zero reading. A center zero indicating meter is recommended for this adjustment, but is not absolutely necessary. Reversing the leads of a non-zero center meter, or observing closely when the meter starts to go to the left (negative) of zero will give the same results.

IMPORTANT

Alignment of this chassis will in most cases be unnecessary unless an IF or RF transformer is replaced or the adjustments have been tampered with.

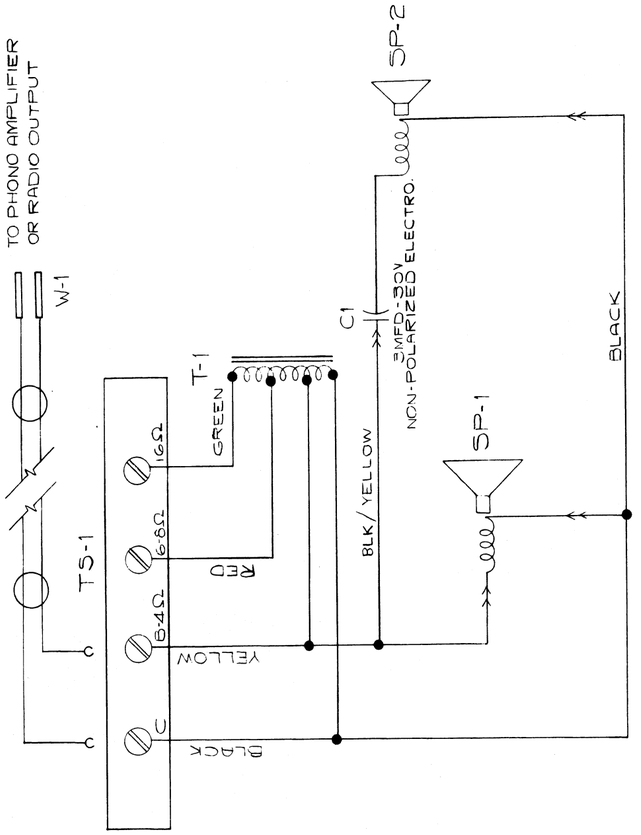
Correct alignment can only be made if the following procedure is followed:

A vacuum tube voltmeter with an isolation resistor of 2,000,000 ohms in series with the hot lead will serve for FM adjustments. This lead should be shielded.

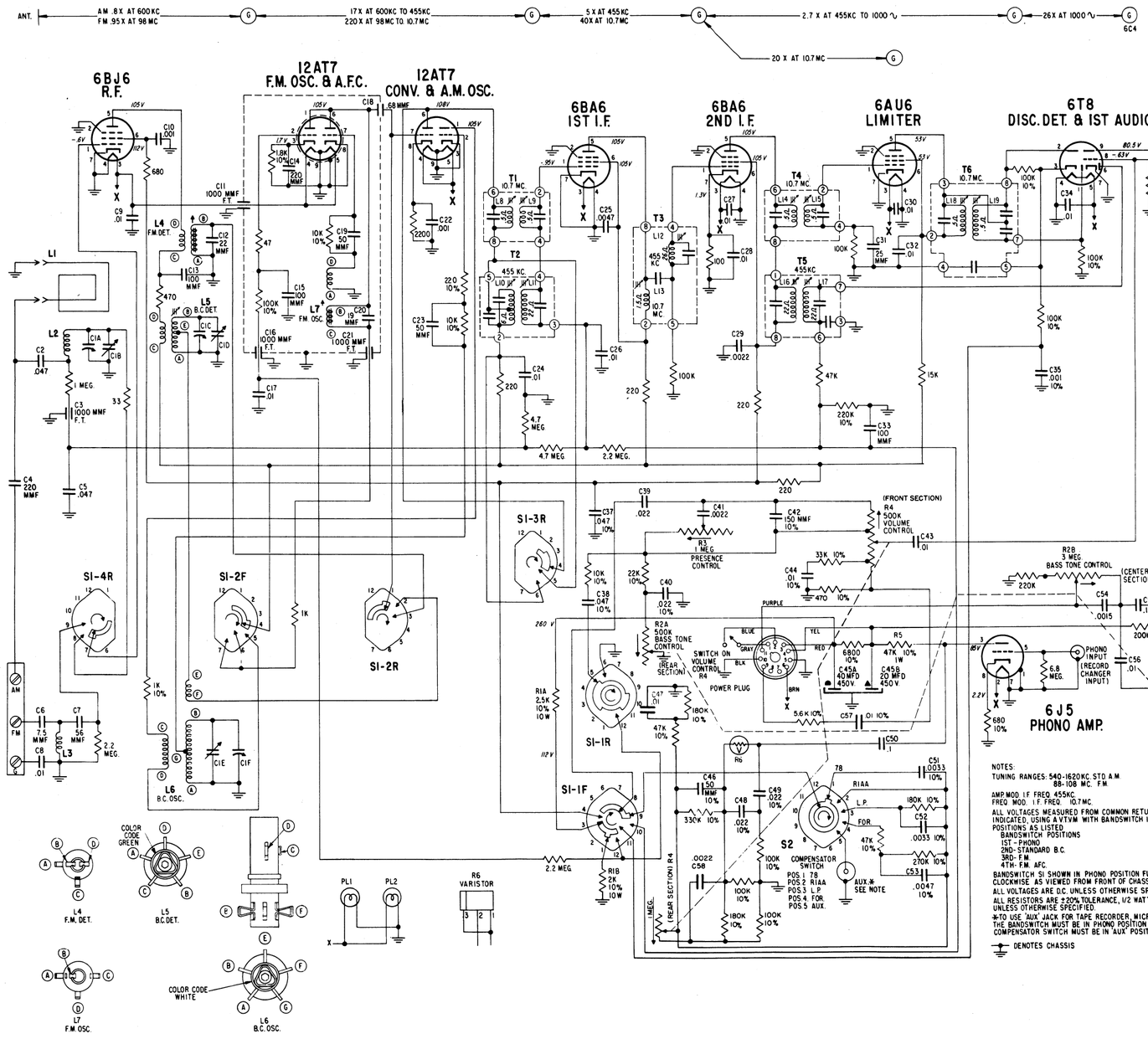
An AC output meter connected across the primary or secondary of the output transformer will be satisfactory for all AM adjustments.

The signal generator output should be kept just high enough to get an indication on the meter.

(a) Vacuum Tube Voltmeter Lug 7 on discriminator transformer to chassis (Half discriminator load).
(b) Vacuum Tube Voltmeter Lug 5 on discriminator transformer to chassis (Full discriminator load).
(c) Vacuum Tube Voltmeter from Limiter Grid to Chassis.
(d) Loosen Slugs by applying a hot iron to the cement.

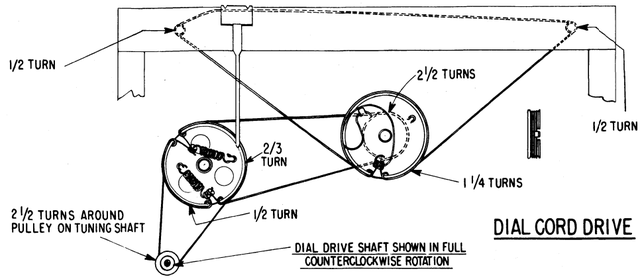


RS-2000 REMOTE SPEAKER UNIT FOR CONTROL CHASSIS 12Z21

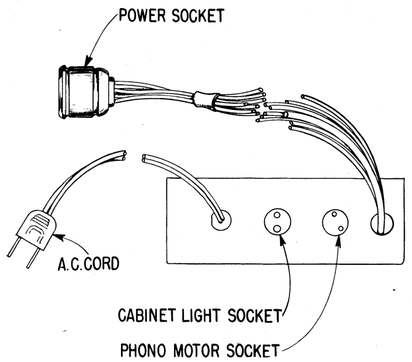


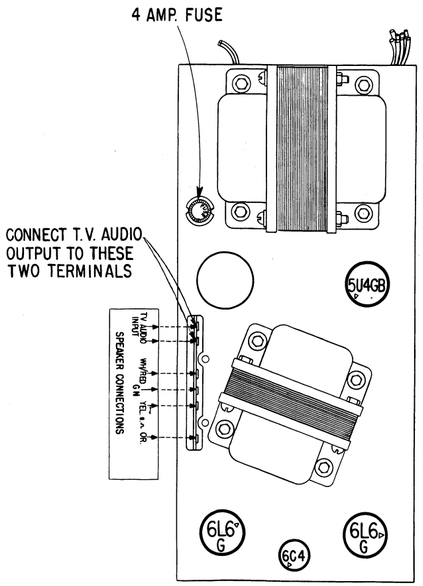
SCHEMATIC MAIN CHASSIS 12Z21

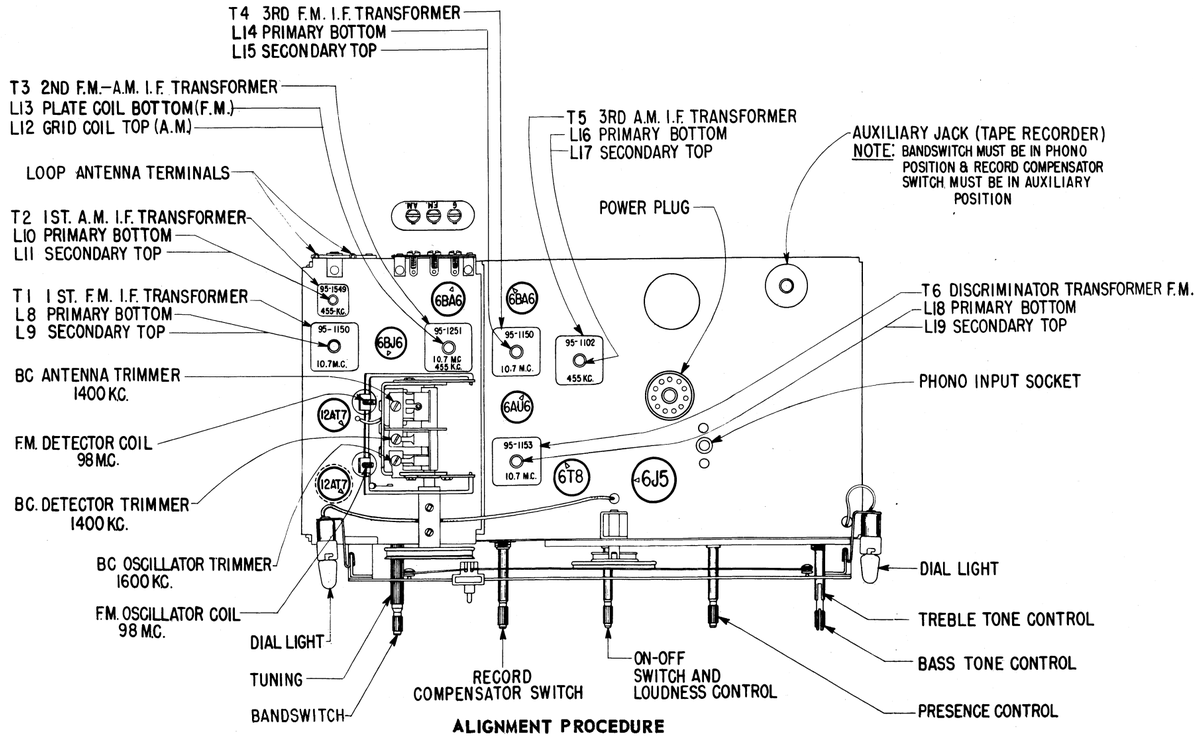
SCHEMATIC POWER SUPPLY & POWER AMPLIFIER CHASSIS 12Z21



DIAL CORD DRIVE







ALIGNMENT PROCEDURE

OPERATION	CONNECT OSCILLATOR TO	DUMMY ANTENNA	INPUT SIGNAL FREQUENCY	BAND	SET DIAL TO	ADJ. TRIMMERS	PURPOSE
1	Pin 7 12AT7 Converter.	.05 mfd.	455 Kc. Modulated	AM	600 Kc.	L10, 11, 12, 16, & 17	Align I.F. channel for maximum output.
2	Antenna Post AM	.05 mfd.	1600 Kc. Modulated	AM	1600 Kc.	C1E	Set oscillator to dial scale.
3	Antenna Post AM	.05 mfd.	1400 Kc. Modulated	AM	1400 Kc.	C1D, C1B	Align detector and antenna stage.
4	**IMPORTANT:** Before attempting to align the FM portion of this receiver the Band switch should be turned to "FM".						
5 (a)	Pin 1 (grid) on 6AU6 limiter	.05 mfd.	10.7 Mc. Unmodulated	FM		L18	Align primary of discriminator for maximum reading.
6 (b)	Pin 1 (grid) on 6AU6 limiter	.05 mfd.	10.7 Mc. Unmodulated	FM		L19	Adjust secondary of discriminator for zero reading.
7 (c)	Pin 1 (grid) on 6BA6 2nd IF	.05 mfd.	10.7 Mc. Unmodulated	FM		L14, 15	Align 3rd IF transformer for maximum reading
8 (c)	Pin 1 (grid) on 6BA6 1st IF	.05 mfd.	10.7 Mc. Unmodulated	FM		L13	Align primary 2nd IF transformer for maximum reading.
9 (c)	Pin 7 on 12AT7 Converter.	.05 mfd.	10.7 Mc. Unmodulated	FM		L8, 9	Align 1st. IF transformer for maximum reading.
10 (c)	**REPEAT STEPS 7, 8 & 9**						
11 (c)	Antenna Post FM (Remove line antenna)	270 ohms	98 Mc. Unmodulated	FM	98 Mc.	L7 Osc. Coil Slug.	Set Oscillator to dial scale.
12 (c) (d)	Antenna Post FM (Remove line antenna)	270 ohms	98 Mc. Unmodulated	FM	98 Mc.	L4 Det. Coil Slug.	Align det. stage to maximum reading.

TO THE SERVICE MAN:

The 12Z21 chassis incorporates a superheterodyne circuit with two stages of IF, on the FM Band, and two stages on the AM Band. There is one stage of RF amplification on all Bands. The 6J5 preamplifier is necessary when the Cobramatic record changer with stroboscope is used.

This receiver features an Automatic Frequency Control on FM, which automatically keeps the oscillator on the exact station frequency when it is tuned to an FM station. Turn the band switch to FM-AFC position and tune the receiver.

When the desired FM station is a weak station, adjacent in frequency to a strong station, the AFC may pull the tuning into the stronger station. Under these conditions, place the band switch in FM position and tune the receiver as instructed under "Frequency Modulation."

FM RF Alignment: The tuning slugs are attached to threaded shafts and the slugs are varied in the field of the coils by turning the shafts clockwise or counter-clockwise. After adjustment the shafts must be secured with a drop of speaker cement.

AM and FM Alignment: The AM and FM IF transformers in these receivers are of the new permeability tuned type. The advantage of an IF transformer of this type is its extreme stability under various humidity and temperature conditions. The upper coil is the secondary and the lower the primary. When adjusting these IF transformers the tuning wrench 68-26 can be inserted into the top slug, rotated until maximum output is obtained and then dropped down to the lower slug and the same operation repeated. The tuning wrench is so designed that turning one slug does not affect the adjustment of the other.

FM IF Alignment: Because of the wide band pass, it is desirable to use a FM signal generator and a cathode ray oscilloscope when aligning the FM IF channel. The instruction book for the Zenith Model 800 Signal Generator (Form Z8001) covers complete FM alignment procedure. If visual alignment equipment is unavailable, reasonably accurate alignment can be made by following the procedure outlined below.

FM Discriminator Alignment: When the secondary of the discriminator is aligned (operation 5) use sufficient signal input to get a good positive and negative indication before setting the slug for zero reading. A center zero indicating meter is recommended for this adjustment, but is not absolutely necessary. Reversing the leads of a non-zero center meter, or observing closely when the meter starts to go to the left (negative) of zero will give the same results.

IMPORTANT

Alignment of this chassis will in most cases be unnecessary unless an IF or RF transformer is replaced or the adjustments have been tampered with.

Correct alignment can only be made if the following procedure is followed:

A vacuum tube voltmeter with an isolation resistor of 2,000,000 ohms in series with the hot lead will serve for FM adjustments. This lead should be shielded.

An AC output meter connected across the primary or secondary of the output transformer will be satisfactory for all AM adjustments.

The signal generator output should be kept just high enough to get an indication on the meter.

(a) Vacuum Tube Voltmeter Lug 7 on discriminator transformer to chassis (Half discriminator load).
(b) Vacuum Tube Voltmeter Lug 5 on discriminator transformer to chassis (Full discriminator load).
(c) Vacuum Tube Voltmeter from Limiter Grid to Chassis.
(d) Loosen Slugs by applying a hot iron to the cement.

TUBE, TRIMMER LOCATION & ALIGNMENT PROCEDURE CHASSIS 12Z21

CHASSIS AND CABINET PARTS LIST

3Z04-3A04 CHASSIS PARTS

Part No.	Dia. No.	Description	Price
11-103		Line cord	1.00
22-3	C5,8,11 14,15	.01 mfd. ceramic disc-1KV (5 used)	.30
22-11	C10	.0033 mfd. ceramic disc-500V.	.25
22-12	C2	.0015 mfd. ceramic disc-500V.	.25
22-16	C9	470 mmf. ceramic disc-800V.	.25
22-17	C4	.001 mfd. ceramic disc - 1 KV	.25
22-1777	C12	.1 mfd. molded - 200V.	.35
22-2765	C6	.47 mfd. tubular - 200V.	.60
22-2792	C1,16	.047 mfd. tubular - 200V. (2 used)	.35
22-2807	C7	.022 mfd. tubular - 200V.	.25
22-2839	C13	.0022 mfd. tubular - 600V.	.30
22-2863	C3	33 mmf. ceramic disc - 500V.	.25
22-2864	C17A,B	Electrolytic 40/150V, 100/150V	2.50
44-25		Phono jack	.25
54-139		3/8-32x9/16 hex palnut (1 mts. ea. 63-4003 & 4004)	.01
54-267		6-32x5/16 hex palnut (used on 114-510)	.01
63-965	R6	1000 ohm 1W Ins. 10%	.25
63-1757		220 ohm 1/2W Ins. 10% (2 used)	.17
63-1785		1000 ohm 1/2W Ins. 10%	.17
63-1799		2200 ohm 1/2W Ins. 10%	.17
63-1806		3300 ohm 1/2W Ins. 10%	.17
63-1810		3900 ohm 1/2W Ins. 10%	.17
63-1817		5600 ohm 1/2W Ins. 10%	.17
63-1827		10 K ohm 1/2W Ins. 10%	.17
63-1848		33 K ohm 1/2W Ins. 10%	.17
63-1856		47 K ohm 1/2W Ins. 20% (2 used)	.17
63-1870		100 K ohm 1/2W Ins. 20%	.17
63-1883		220 K ohm 1/2W Ins. 10% (2 used)	.17
63-1884		220 K ohm 1/2W Ins. 20% (2 used)	.17
63-1887		270 K ohm 1/2W Ins. 10%	.17
63-1890		330 K ohm 1/2W Ins. 10%	.17
63-1947		6.8 megohm 1/2W Ins. 20%	.17
63-3197	R4	22 ohm 1W Ins. 20%	.25
63-3636	R3	82 ohm 1W Ins. 10%	.25
63-3643	R5	33 ohm 2W Ins. 20%	.34
63-4003	R2A,B	Dual tone control	2.75
63-4004	R1	Volume control	1.40
78-275		Electrolytic socket	.05
78-402		4 contact socket	.15
78-810		7 contact miniature tube socket (1 mts. ea.50C5)	.15
78-846		9 pin miniature tube socket (mts. 12AX7)	.25
83-1119		Insulating strip	
83-2115		7 lug terminal strip	.05
83-2216		7 lug terminal strip	.15
83-2307		4 lug terminal strip	.10
83-2454		4 lug terminal strip (2 used)	.10
83-2494		Insulating strip	.05
83-2530		Armite strip	.10
83-2628		1 lug terminal strip	.05
83-2635		5 lug terminal strip	.10
86-254		Terminal (part of S-24248)	.05
93-2		Brass washer (2 mt. 95-1481)	.01
95-1481	T1	Output transformer	4.00
114-510		6-32x1 5/8x1/4 hex hd. mach. screw (mts.212-18)	.03
125-96		Strain relief grommet	.10
212-18	SE1	Selenium rectifier	2.35
S-24248		Wire & terminal assem.-	
63-3637	R2A,B	1 meg. treble - 20K bass	
63-3687	R1	3 megohm volume control	

CABINET PARTS FOR MODELS A-HF10G, B-HF10L, C-HF10Y, D-HF11F, E-HF11L

Part No.	Code	Description	Price
14-2113L	B	Table cabinet	
14-2113Y	C	Table cabinet	
14-2258F	D	Table cabinet	
14-2258L	E	Table cabinet	
14-2293G	A	Table cabinet	
16-1276	B,C	Packing carton	
16-1346	D,E	Packing carton	
16-1375	A	Packing carton	
19-298	A,B,C,D, & E	Mounting clip	.20
24-800	B,C	Chassis cover	2.50
24-855	D,E	Chassis cover	2.25
24-870	A	Chassis cover	2.25
36-151	B	Cabinet handle (part of 14-2113L)	1.00
36-152	C	Cabinet handle (part of 14-2113Y)	1.00
36-153	A	Cabinet handle (part of 14-2293G)	
36-177	D	Cabinet handle (part of 14-2258F)	
36-184	E	Cabinet handle (part of 14-2258L)	
40-157	B,C,D,E	Lid support hinge (part of cabinet)	1.30
40-189	B,C,D,E	Stop hinge (2 part of cabinet)	
40-200	A	Lid support hinge (part of 14-2293G)	
40-201	A	Stop hinge (2 part of 14-2293G)	
46-1300	B	Knob-tone	.25
46-1301	A,C	Knob-tone	.25
46-1317	B	Knob-vol. & tone	.50
46-1318	A,C	Knob-vol. & tone	.50
46-1615	A,C	Knob-dummy	.25
46-1616	B	Knob-dummy	.25
46-1813	D	Tone control knob-treble	.15
46-1815	D	Tone control knob-bass	.25

Part No.	Code	Description	Price
46-1827	D	Volume control knob	.25
46-1852	E	Tone control knob-treble	.15
46-1853	E	Tone control knob-bass	.25
46-1854	E	Volume control knob	.25
49-795	A,B,C,D, & E	7 1/2" PM speaker	8.50
54-10	A,D,E	8-32x1/4 hex nut (3 part of cabinet)	.02
54-30	A,B,C,D, & E	8-32x5/16 hex nut (3 mt. 49-795)	.01
54-254	D,E	Tinnerman speed nut (5 part of cabinet)	.02
57-1721	D,E	Emblem plate (part of cab).	.25
57-2428	D,E	Nameplate (Zenith) (part of cabinet)	.40
57-2429	D,E	Nameplate (Hi-Fidelity) (part of cabinet)	.40
70-173	A	6x3/8 Phils. rd. hd. wood screw (6 mt. 24-870)	.02
70-215	B,C,D,E	6x3/8 Phils. rd. hd. wood screw	.04
70-223	B,C	8x7/8 Phils. oval hd. wood screw (2 used on & 2 part of 14-2113L & Y)	.05
70-238	A,B,C	8x7/8 Phils. rd. hd. wood screw (2 part of cab.)	.04
70-239	D,E	6x7/8 Phils. oval hd. wood screw (2 part of & 2 used on cabinet)	.04
70-243	A	6x7/8 Phils. oval hd. wood screw (2 used on & 2 part of 14-2293G)	.03
74-112	A,B,C,D, & E	Ventilating screen	.15
83-765	A,B,C,D, & E	Armite strip (2 used)	.02
83-1475	A,B,C,D, & E	Armite strip	.01
83-2524	B,C	Phono shipping strip	.25
83-2535	A,B,C,D, & E	Phono shipping strip (2 used)	.02
83-2761	A,D,E	Phono shipping strip	.15
86-254	A,B,C,D, & E	Terminal	.05
93-1011	A,B,C,D, & E	13/64x1/2x1/32 steel washer (3 used on 49-795)	.02
93-1217	D,E	Finishing washer (2 part of cab. & 1 used on each 70-239)	.01
93-1241	A,B,C	Finishing washer (2 part of & 2 used on cabinet)	.02
93-1260	A,B,C,D, & E	Fibre washer	.03
93-1290	A	Finishing washer (2 used on & 2 part of 14-2293G)	.01
97-467	B,C,D,E	Handle mtg. stud (2 part of cab inet)	.25
97-487	A	Handle stud (2 part of 14-2293G)	.25
112-788	A,B,C,D, & E	8-32x1 1/8 swedged hd. mach. screw (3 part of cabinet)	.03
112-1038	A,B,C,D, & E	Record changer mtg. screw	.15
114-329	A,B,C	6-18x1/4 hex hd. self-tap screw (4 used)	.02
114-478	A,B,C,D, & E	10-32x1/2 hex slot hd. mach. screw-flat washer att. (4 used on chassis)	.03
114-522	A,B,C,D, & E	5-20x1/2x1/4 hex hd. self-tap screw (mts. 19-298)	.02
114-530	D,E	6-18x5/16x1/4 hex hd. self-tap screw (2 mt. ea. S-23829)	.02
142-80	A,B,C,D, & E	Dual cartridge (sapphire-sapphire)	3.95
156-45	B,C,D,E	Cover latch (2 part of cabinet)	1.50
156-52	A	Cover latch (2 part of 14-2293G)	
159-94	B,C,D,E	Plug button (4 part of cabinet)	.10
159-95	B,C,D,E	Plug button screen (2 part of cabinet)	.55
159-101	A	Plug button (4 used)	
159-102	A	Plug button screen (2 used)	
165-29	B,C,D,E	Metal glide (4 part of cab.).	.10
165-37	A	Metal glide (4 part of cab.)	
188-54	E	Knob clamping ring (1 used on ea. 46-1852 & 1853)	.02
188-102	A,B,C	Knob retaining ring (1 used on ea. 46-1300, 1301, 1615, 1616)	.02
188-195	A,B,C,D, & E	Retaining ring	.03
202-1237	B,C	Instruction book	.20
202-1305	A,D,E	Instruction book	.30
S-14073	B,C	Record changer assem.	
S-14078	D,E	Record changer assem.	
S-14079	A	Record changer assem.	
S-23829	A,B,C,D, & E	Tweeter speaker assem. (2 used)	1.10
S-23934	B,C	Cartridge holder assem. (part of S-14073)	1.10
S-24231	B,C	45 R.P.M. record adapter assem. (used with S-14073)	
S-41437	A,D,E	45 R.P.M. record adapter assem.	2.95
S-41623	A,D,E	Cartridge holder assem.	1.00

3A03 CHASSIS PARTS

Part No.	Dia. No.	Description	Price
11-85		Line cord	.75
22-3	C12	.01 mfd. disc ceramic - 1KV	.30
22-6	C3	470 mmf. disc ceramic - 1KV	.25
22-12	C1	.0015 mfd. disc ceramic-500V.	.25
22-2376	C4	47 mmf. disc ceramic - 500V.	.25
22-2670	C9	.0033 mfd. disc ceramic-500V.	.25
22-2707	C11A, 11B,11C	Electrolytic 20/350, 40/350 40/350	3.50
22-2777	C6	.22 mfd. paper-200V.	.35
22-2782	C2	.1 mfd. paper-600V.	.45
22-2792	C10	.047 mfd. paper-200V.	.30
22-2800	C7	.033 mfd. paper-600V.	.35
22-2815	C8	.01 mfd. paper-600V.	.25
22-2837	C5	.0022 mfd. paper-200V.	.30
54-139		3/8-32x9/16 hex palnut (1 mts. ea. 63-4015,4016,4017)	

Part No.	Dia. No.	Description	Price
63-1785		1000 ohm 1/2 W Ins. 10%	.17
63-1792		1500 ohm 1/2 W Ins. 10%	.17
63-1796		1800 ohm 1/2 W Ins. 10%	.17
63-1810		3900 ohm 1/2 W Ins. 10%	.17
63-1817		5600 ohm 1/2 W Ins. 10%	.17
63-1855		47 K ohm 1/2 W Ins. 10% (2 used)	.17
63-1863		68 K ohm 1/2 W Ins. 20% (2 used)	.17
63-1873		120 K ohm 1/2 W Ins. 10%	.17
63-1877		150 K ohm 1/2 W Ins. 20%	.17
63-1898		470 K ohm 1/2 W Ins. 20%	.17
63-1933		3.3 megohm 1/2 W Ins. 20%	.17
63-2387	R4	180 ohm 1 W Ins. 10%	.25
63-3206	R6	220 ohm 1W Ins. 10%	.25
63-3207	R5	5600 ohm 1 W Ins. 10%	.25
63-4015	R1	Tone control (Bass)	1.40
63-4016	R2	Tone control (Treble)	1.40
63-4017	R3	Volume control	1.40
78-402		4 contact socket	.15
78-644		Connector socket	.15
78-755		Octal tube socket (1 mt. ea. 6X5GT & 6V6GT)	.20
78-846		Noval tube socket (mts. 12AU7)	.25
83-2145		5 lug terminal strip	.10
83-2454		4 lug terminal strip	.10
83-2639		3 lug terminal strip	.05
86-237		Connector terminal (spkr. terminals)	.02
95-1392	T2	Power transformer	12.50
95-1453	T1	Output transformer	4.00
114-365		8-32x3/8 hex hd. self-tap screw-flat washer att. (4 mt. 95-1392)	.05
125-96		Strain relief grommet (used on 11-85)	.10

CABINET PARTS FOR MODELS A-HF16E, B-HF16R

Part No.	Code	Description	Price
14-2264E	A	Record player cab.	
14-2264R	B	Record player cab.	
16-1361	A,B	Packing carton	
19-298	A,B	Mtg. clip (for S-41437)	.20
46-1828	A,B	Knob-tone control & vol. control (3 used)	.50
49-828	A,B	7 1/2" PM speaker	9.00
54-10	A,B	8-32x1/4 hex nut (4 part of 14-2264E & R)	.02
54-30	A,B	8-32x5/16 hex nut (4 mt. 49-828)	.01
54-254	A,B	Speed nut (3 part of 14-2264E & R)	.02
54-413	A,B	Speed nut (3 part of 14-2264E & R)	.01
57-1613	A,B	Emblem plate (part of 14-2264E & R)	.25
57-2199	A,B	Nameplate (Zenith) (part of 14-2264E & R)	1.25
57-2281	A,B	Nameplate (Hi-Fidelity) (part of 14-2264E & R)	.65
57-2403	A,B	Control panel	3.00
70-240	B	8x1/2 Phils. pan hd. wood screw (2 part of 14-2264R)	.03
70-241	A	8x1/2 Phils. rd. hd. wood screw (2 part of 14-2264E)	.03
72-125	A,B	8x7/8 Phils. flat hd. wood screw (7 used)	.05
72-136	A,B	4x3/8 Phils. flat hd. wood screw (3 mt. 57-2403)	.04
74-116	A,B	Protective screen (2 used)	.30
83-765	A,B	Armite strip	.02
83-1475	A,B	Armite strip	.01
83-2761	A,B	Phono shipping strip	.15
83-2790	A,B	Phono shipping strip (2 used)	.05
86-254	A,B	Connector terminal (4 used)	.05
93-1260	A,B	Fibre washer (2 part of S-14078)	.03
96-159	B	Cabinet leg (4 part of 14-2264R)	
96-160	A	Cabinet leg (4 part of 14-2264E)	
97-452	B	Stud-hinge mtg. with screw (8 part of 14-2264R)	.20
97-453	A	Stud-hinge mtg. with screw (8 part of 14-2264E)	.20
112-1038	A,B	Record Changer mtg. screw (2 part of S-14078)	.15
112-1090	A,B	8-32x7/8 swedge hd. mach. screw (4 part of 14-2264 E & R)	
114-251	A,B	Chassis mtg. screw (4 used)	.03
114-521	A,B	5-20x5/16x1/4 hex hd. self. tap screw (mts. 19-298)	.02
114-530	A,B	6-18x5/16x1/4 hex hd. self. tap screw (2 mt. ea. S-23829)	.02
142-80	A,B	Dual pickup cartridge (sapphire-sapphire) (part of S-14078)	3.95
188-195	A,B	Retaining ring (2 part of S-14078)	.03
202-1298	A,B	Instruction book	.30
S-14078	A,B	4 speed record changer	
S-23829	A,B	Tweeter speaker assem.	1.10
S-41437	A,B	45 R.P.M. record adapter assem.	2.95
S-41623	A,B	Cartridge holder assem.	1.00

5Z21 CHASSIS PARTS

Part No.	Dia. No.	Description	Price
11-103		Line cord & plug	1.00
15-115		Fuseholder cap	.25
22-3	C18	.01 mfd. ceramic disc	.30
22-12	C1	.0015 mfd. ceramic disc	.25
22-14	C13,15	.0047 mfd. ceramic disc (2 used)	.25

Part No.	Dia. No.	Description	Price
22-17	C6	.001 mfd. ceramic disc	.25
22-1612	C16A,B	Electrolytic	3.50
22-2310	C10	560 mmf. ceramic disc	.25
22-2627	C17A,B,C	Electrolytic	3.00
22-2782	C11,12	.1 mfd. molded - 600 V. (2 used)	.45
22-2792	C7,9,14	.047 mfd. molded - 200 V.	.35
22-2794	C5,8	.047 mfd. molded - 600 V. (2 used)	.35
22-2804	C3	.022 mfd. molded - 200 V.	.25
22-2819	C2	.0068 mfd. molded - 200 V.	.25
22-2875	C4	150 mmf. ceramic disc	.25
54-139		3/8-32x9/16 palnut (1 mts. ea. 63-3654, 3655, 3688, 3657, & 85-578)	.01
54-382		Hex nut (mts. 62-17)	.06
62-17		Fuse receptacle	.40
63-957	R2	33 K ohm 1W Ins. 10%	.25
63-1193	R8	5600 ohm 2W Ins. 10%	.34
63-1778		680 ohm 1/2W Ins. 10%	.17
63-1799		2200 ohm 1/2W Ins. 10%	.17
63-1806		3300 ohm 1/2W Ins. 10%	.17
63-1807		3300 ohm 1/2W Ins. 20%	.17
63-1813		4700 ohm 1/2W Ins. 10% (3 used)	.17
63-1820		6800 ohm 1/2W Ins. 10%	.17
63-1827		10 K ohm 1/2W Ins. 10%	.17
63-1848		33 K ohm 1/2W Ins. 10%	.17
63-1852		39 K ohm 1/2W Ins. 10%	.17
63-1855		47 K ohm 1/2W Ins. 10%	.17
63-1877		150 K ohm 1/2W Ins. 20%	.17
63-1883		220 K ohm 1/2W Ins. 10% (3 used)	.17
63-1884		220 K ohm 1/2W Ins. 20%	.17
63-1887		270 K ohm 1/2W Ins. 10%	.17
63-1898		470 K ohm 1/2W Ins. 20%	.17
63-1911		1 megohm 1/2W Ins. 10%	.17
63-1925		2.2 meg. 1/2W Ins. 10%	.17
63-1961		15 megohm 1/2W Ins. 20%	.17
63-2281	R7	120 ohm 2W Ins. 10%	.34
63-3158	R6	220 ohm 2W Ins. 10%	.34
63-3654	R4	Treble tone control	1.40
63-3655	R3	Bass tone control	1.40
63-3657	R5	Presence control	1.40
63-3688	R1	Volume control & sw.	1.40
78-402		2 contact socket	.15
78-644		Connector socket	.15
78-755		Octal tube socket (4 used)	.20
78-846		Miniature wafer tube socket	.25
83-1426		4 lug terminal strip	.10
83-1443		3 lug terminal strip	.05
83-1454		5 lug terminal strip	.10
83-1572		7 lug terminal strip	.10
83-2522		6 lug terminal strip	.10
83-2627		2 lug terminal strip	.05
85-578	S1	Record compensator sw.	1.40
93-1179		Rubber washer (used on 62-17)	.01
93-1180		1/2" Int. tooth lockwasher (used on 62-17)	.03
95-1410	T2	Power transformer	16.25
95-1489	T1	Output transformer	4.00
114-370		10-32x1/2 hex hd. self-tap screw (4 mt. 95-1410)	.05
125-96		Strain relief grommet	.10
136-32	F1	Fuse - 1 1/2 Amp. - type 3AG	.15
199-171		Shielded paper sleeve	.02

CABINET PARTS FOR MODELS A-HF17E, B-HF17H, C-HF17R D-HF20R, E-HF21E

Part No.	Code	Description	Price
2-543	A,B,C	Cabinet back	.50
14-2114R	D	Record player cabinet	
14-2115E	E	Record player cabinet	
14-2304E	A	Record player cabinet	
14-2304H	B	Record player cabinet	
14-2304R	C	Record player cabinet	
16-1340	E	Packing carton	
16-1384	A,B,C	Packing carton	
19-298	A,B,C,D, & E	Mounting clip (for S-41437)	.20
40-185	D	Support hinge (part of 14-2114R)	2.25
40-186	E	Support hinge (part of 14-2115E)	2.25
40-194	D	Lid support hinge (part of 14-2114R)	.60
40-195	C,D	Lid hinge	.60
40-196	E	Lid support reinforcing hinge (part of 14-2115E)	.60
40-197	A,B,E	Lid hinge	.60
40-202	C	Lid support hinge (2 part of 14-2304R)	
40-203	A,B	Lid support hinge (2 part of 14-2304E & H)	
46-1828	E	Control knob	.50
46-1856	C,D	Control knob (5 used)	.50
46-1857	A,B	Control knob (5 used)	.50
49-802	D,E	12" P.M. speaker (2 used)	
49-833	A,B,C	12" P.M. speaker	
54-10	A,B,C	8-32x1/4 hex nut (4 part of cabinet)	.02
54-30	D,E	8-32x5/16 hex nut (part of cabinet)	.01
54-254	A,B,C,D, & E	Speed nut-Tinnerman (5 part of cabinet)	.02
54-368	D	Tee nut (2 part of 14-2114R)	.10
54-424	A,B,C,D, & E	8-32x11/32 hex palnut (4 mt. 49-833)	.02
57-2235	A,B,C,D, & E	Emblem plate (part of cabinet)	.75
57-2273	A,B,C,D, & E	Nameplate (Hi-Fidelity) (part of cabinet)	.30
57-2280	A,B,C,D. & E	Nameplate (Zenith) (part of cabinet)	.15
83-765	A,B,D,C, & E	Armite strip (2 used)	.02
83-1475	A,B,C	Armite strip (2 used)	.01
83-2535	A,B,C,D & E	Phono shipping strip (2 used)	.02
83-2762	A,B,C	Phono shipping strip	.15
83-2763	D,E	Phono shipping strip	.15
86-237	A,B,C,D, & E	Connector terminal (2 for speaker)	.02
86-254	A,B,C,D, & E	Connector terminal (6 for speaker)	.05
93-1173	E	Finishing washer (6 part of 14-2115E)	.01

Part No.	Code	Description	Price
93-1196	D	Finishing washer (6 part of 14-2114R)	.01
93-1260	A,B,C,D, & E	Fibre washer (2 part of S-14078)	.03
96-143	C	Cabinet leg (4 part of 14-2304R)	
96-144	A	Cabinet leg (4 part of 14-2304E)	
96-145	B	Cabinet leg (4 part of 14-2304H)	
102-2253	A,B,C,D, & E	Decal (Hi-Fidelity) (part of cabinet)	.15
112-788	A,B,C,D, & E	8-32x1 1/8 swedge hd. mach. screw (4 part of cabinet)	.03
112-1038	A,B,C,D, & E	Record changer mtg. screw (2 part of S-14078)	.15
114-329	A,B,C,D, & E	6-18x3/8x1/4 hex hd. self-tap screw (2 mt. ea. S-23829)	.02
114-386	A,B,C,D, & E	Chassis mtg. screw (4 used)	.10
114-453	A,B,C	6-18x5/8 hex slot hd. self-tap screw-flat washer att. (8 mt. 2-543)	.10
114-521	A,B,C,D, & E	5-20x5/16x1/4 hex hd. self-tap screw (mts. 19-298)	.02
126-780	A,B,C,D, & E	Heat shield	.25
142-80	A,B,C,D, & E	Dual pickup cartridge (sapphire-sapphire) (part of S-14078)	3.95
142-83	D,E	Dual pickup cartridge (diamond-sapphire) (part of S-14084)	21.50
159-90	E	Plug button (2 used)	.15
159-91	D	Plug button (2 used)	.10
188-195	A,B,C,D, & E	Retaining ring	.03
202-1282	D,E	Instruction book	.40
202-1309	A,B,C	Instruction book	.30
S-14078	A,B,C,D, & E	4 speed record changer	
S-14084	D,E	4 speed record changer	
S-23829	A,B,C,D, & E	Tweeter speaker assem. (2 used)	1.10
S-24381	D,E	Speaker lead & term. assembly	.40
S-41437	A,B,C,D, & E	45 R.P.M. record adapter assembly	2.95
S-41623	A,B,C,D, & E	Cartridge holder assem. (part of record changer)	1.00

7Z20 CHASSIS PARTS

Part No.	Dia. No.	Description	Price
11-103		Line cord & plug	1.00
12-2054		Pulley support brkt.	.20
15-115		Fuseholder cap	.25
19-306		Coil mtg. clip	.10
22-3	C5,9,29	.01 mfd. ceramic disc (3 used)	.30
22-5	C8	100 mmf. ceramic disc	.25
22-9	C12	.0033 mfd. ceramic disc	.25
22-12	C13	.0015 mfd. ceramic disc	.25
22-14	C24,25	.0047 mfd. ceramic disc (2 used)	.25
22-17	C16,22	.001 mfd. ceramic disc 1000V. (2 used)	.25
22-1612	C27A,B	2x40 electrolytic 450V.	3.50
22-2302	C14	470 mmf. ceramic	.25
22-2310	C19	560 mmf. ceramic	.25
22-2782	C21,23	.1 mfd. paper - 600 V. (2 used)	.45
22-2792	C3,18,26	.047 mfd. paper - 200 V. (3 used)	.35
22-2793	C2,7,15,17	.047 mfd. paper - 400 V. (4 used)	.35
22-2795	C4,20	.047 mfd. paper - 200 V. (2 used)	.25
22-2807	C11	.022 mfd. paper - 200 V.	.25
22-2819	C10	.0068 mfd. paper - 200 V.	
22-2903	C6	22 mmf. ceramic disc	.25
22-2904	C1A,B,C & D	2 section variable cap.	3.25
22-2905	C28A,B	2x20 electrolytic - 350 V.	2.25
54-139		3/8-32x9/16 palnut (1 mts. ea. 63-3681, 63-3682, 63-3683, 85-581 & 582)	.01
54-271		6-32x1/4 palnut (1 mts. ea. 95-1101 & 1102)	.01
54-382		Hex nut (mts. 62-17)	.06
54-434		Speed nut (2 used on S-40397)	.01
59-322		Dial pointer	.50
62-17		Fuse receptacle	.40
63-1489	R10	1200 ohm 2W WW 10%	.34
63-1736		68 ohm 1/2W Ins. 10%	.17
63-1786		1000 ohm 1/2W Ins. 20%	.17
63-1799		2200 ohm 1/2W Ins. 10%	.17
63-1806		3300 ohm 1/2W Ins. 10% (2 used)	.17
63-1814		4700 ohm 1/2W Ins. 20% (2 used)	.17
63-1827		10 K ohm 1/2W Ins. 10% (2 used)	.17
63-1838		18 K ohm 1/2W Ins. 10%	.17
63-1842		22 K ohm 1/2W Ins. 20%	.17
63-1848		33 K ohm 1/2W Ins. 10% (2 used)	.17
63-1852		39 K ohm 1/2W Ins. 10%	.17
63-1855		47 K ohm 1/2W Ins. 10%	.17
63-1856		47 K ohm 1/2W Ins. 20%	.17
63-1873		120 K ohm 1/2W Ins. 10%	.17
63-1877		150 K ohm 1/2W Ins. 20%	.17
63-1883		220 K ohm 1/2W Ins. 10% (3 used)	.17
63-1884		220 K ohm 1/2W Ins. 20% (2 used)	.17
63-1887		270 K ohm 1/2W Ins. 10%	.17
63-1898		470 K ohm 1/2W Ins. 20% (3 used)	.17
63-1912		1 megohm 1/2W Ins. 20%	.17
63-1926		2.2 megohm 1/2W Ins. 20% (2 used)	.17
63-1954		10 megohm 1/2W Ins. 20%	.17
63-1961		15 megohm 1/2W Ins. 20%	.17
63-2281	R8	120 ohm 2W Ins. 10%	.34
63-3158	R7	220 ohm 2W Ins. 10%	.34
63-3223	R1	5600 ohm 2W Ins. 10%	.34
63-3681	R5A,B	Dual tone control	2.75
63-3602	R3	8200 ohm 4W WW 10%	.65
63-3682	R4	Vol. control & switch	2.05
63-3683	R6	Presence control	1.40

Part No.	Dia. No.	Description	Price
63-3684	R9	2700 ohm 3W WW 10%	.45
63-3685	R2	5600 ohm 4W Ins. 10%	.65
78-351		2 contact socket	.10
78-644		Connector socket	.15
78-755		Octal tube socket (3 used)	.20
78-806		7 contact miniature wafer tube socket	.15
78-807		7 contact miniature wafer tube socket	.15
78-846		9 contact miniature wafer tube socket	.25
78-871		7 contact miniature wafer tube socket	.15
78-1005		Pilot light socket & wire (Dial-2 used)	.60
78-1037		Pilot light socket & wire (Cabinet)	.50
80-209		Dial cord tension spring	.03
80-402		Dial cord tension spring	.04
80-1091		Dial cord tension spring	.08
83-2522		6 lug terminal strip	.10
83-2612		2 lug terminal strip	.05
83-2617		6 lug terminal strip (2 used)	.10
83-2618		8 lug terminal strip (2 used)	.10
83-2627		2 lug terminal strip	.05
85-581	S2	Record compensator sw.	1.40
85-582	S1	Phono-radio switch	2.25
93-127		Lockwasher	.01
93-1179		Rubber washer (used on 62-17)	.01
93-1180		1/2" lockwasher (used on 62-17)	.03
94-295		Capacitor mtg. bushing (3 used)	.05
94-812		Coil insert (part of S-40389)	.05
95-1101	T1	1st. I.F. transformer	3.00
95-1102	T2	2nd I.F. transformer	3.00
95-1525	T4	Power transformer	15.00
95-1526	T3	Audio output transformer	4.00
100-67	PL1,2,3	Pilot light bulb (2 used)	.15
113-34		6-32x3/8x1/4 hex hd. mach. screw (3 used)	.02
114-39		8-32x1/4x1/4 hex hd. self-tap screw (2 mt. 22-2904)	.01
114-201		8-32x5/16x1/4 hex hd. self-tap screw (2mt. 95-1526)	.01
114-297		6-32x1/4x1/4 hex hd. self-tap screw (used on 12-2054)	.01
114-326		8-32x1/4x1/4 hex hd. self-tap screw (2 used on S-40392)	.02
114-370		10-32x1/2 hex hd. self-tap screw-flat washer att. (4 mt. 95-1525)	.05
114-459		8-32x1/2x1/4 hex slab hd. self-tap screw	.05
114-545		8-15x1/4x1/4 hex hd. self-tap screw (joins 12-2054 & 126-831)	.02
114-551		8-32x5/16x1/4 hex hd. self-tap screw (2 mt. ea. S-40395 & S-40396)	.02
125-17		Rubber grommet (3 mt. 22-2904)	.03
125-96		Strain relief grommet	.10
126-554		Tube shield	.05
126-831		Heat shield	.50
126-835		Pilot light shield	.10
136-32		Fuse-type 3AG - 1 1/2 A.	.15
149-85		Iron core (part of S-40389)	.10
188-60		Retaining ring (mts. 85-582)	.02
188-149		Retaining ring (used on S-40394)	.02
S-40389	L2	Osc. coil assem.	1.00
S-40391		Tuning shaft & pulley assembly	.50
S-40392		Idler pulley & strip assembly	.75
S-40394		Pulley & shaft assem.	.50
S-40395		Dial brkt. assem. (left)	.35
S-40396		Dial brkt. assem. (right)	.35
S-40397		Dial scale & background strip assem.	3.50
S-40407		Drive cord & eyelet assem. - gang	.10
S-40408		Drive cord & eyelet assem. - pointer	.15
S-40409		Drive cord & eyelet assem. - idler	.15

CABINET PARTS FOR MODELS A-HF774E, B-HF774H, C-HF774R

Part No.	Code	Description	Price
2-529	A,B,C	Cabinet back	2.00
14-2092E	A	Console combination cab inet	
14-2092H	B	Console combination cabinet	
14-2092R	C	Console combination cabinet	
16-1334	A,B,C	Packing carton	
19-298	A,B,C	Mounting clip (holds S-41437)	.20
40-185	B,C	Support hinge (part of 14-2092H & R)	2.25
40-186	A	Support hinge (part of 14-2092E)	2.25
40-194	B,C	Lid support reinforcing hinge (part of 14-2092H & R)	.60
40-195	B,C	Lid hinge (part of 14-2092 H & R)	.60
40-196	A	Lid support reinforcing hinge (part of 14-2092E)	.60
40-197	A	Lid hinge (part of 14-2092E)	
46-1639	A,B,C	Tuning knob	.50
46-1640	A,B,C	Tone control knob-bass	.50
46-1828	A,B,C	Knob (phono-radio record compensator-vol. presence)	.50
46-1829	A,B,C	Tone control knob-treble	.50
49-802	A,B,C	12" PM speaker (2 used)	15.00
54-10	A,B,C	8-32x1/4 hex nut (8 part of cabinet)	.02
54-254	A,B,C	Speed nut-Tinnerman (5 part of cabinet)	.02

Part No.	Code	Description	Price
54-424	A,B,C	8-32x11/32x7/64 hex palnut (4 mt. ea.49-802)	.02
57-2273	A,B,C	Nameplate (Hi-Fidelity) (part of cabinet)	.30
57-2280	A,B,C	Nameplate (Zenith) (part of cabinet)	.15
57-2400	A,B,C	Radio dial escutcheon	4.00
57-2401	A,B,C	Control panel	3.00
72-136	A,B,C	4x3/8 Phils. flat hd. wood screw (4 used on 57-2401)	.04
83-765	A,B,C	Armite strip (4 used)	.02
83-2535	A,B,C	Phono shipping strip (2 used)	.02
83-2657	A,B,C	Pilot light socket mtg. strip	.06
83-2762	A,B,C	Phono shipping strip	.25
86-237	A,B,C	Terminal (4 part of S-24381)	.02
86-254	A,B,C	Connector terminal (2 part of ea. S-24381 & S-40420, & 2 used on ea. S-23829)	.05
90-367	A,B,C	Pilot light tube	.05
93-1260	A,B,C	Fibre washer (2 part of S-14078)	.03
100-189	A,B,C	Dial light bulb	.15
102-2253	A,B,C	Decal-high fidelity (part of cabinet)	.15
112-789	A,B,C	8-32x1 3/8 swedged hd. mach. screw (8 part of cabinet)	.02
112-1038	A,B,C	Record changer mtg. screw (2 part of S-14078)	.15
114-329	A,B,C	6-18x3/8x1/4 hex hd. self-tap screw (2 used on ea. S-23829, & 1 on 83-2657)	.02
114-386	A,B,C	Chassis mtg. screw (4 used)	.10
114-453	A,B,C	6-18x5/8 hex slot hd. self-tap screw-flat washer att. (2 mt. S-40420, & 9 mt. 2-529)	.10
114-522	A,B,C	5-20x1/2x1/4 hex hd. self-tap screw (mts. 19-298)	.02
142-80	A,B,C	Dual pickup cartridge (sapphire-sapphire) (part of S-14078)	3.95
159-50	A	Plug button (2 used on 14-2092E)	.01
159-91	B,C	Plug button (2 used on 14-2092H & R)	.10
171-16	A,B,C	Pilot light lens	.25
188-54	A,B,C	Knob clamping ring (1 used on ea. 46-1639 & 1640)	.02
188-195	A,B,C	Retaining ring (2 part of S-14078)	.03
192-229	A,B,C	Dial crystal	1.50
202-1279	A,B,C	Instruction book	.50
S-14078	A,B,C	4 speed record changer	
S-23829	A,B,C	Tweeter speaker assem. (2 used)	1.10
S-24381	A,B,C	Speaker lead & terminal assembly	.40
S-40420	A,B,C	Antenna assembly	1.10
S-41437	A,B,C	45 R.P.M. record adapter assembly	2.95
S-41623	A,B,C	Cartridge holder assem. (part of S-14078)	1.00

11Z20, 11Z20Z, 12Z20 CHASSIS PARTS

Part No.	Dia. No.	Description	Price
11-103		Line cord & plug	1.00
12-1406		Tuner arm pivot pin (2 used on 22-2925)	.05
12-2054		Pulley support brkt.	.20
12-2386		Band switch support brkt. (2 part of 85-583)	.20
15-115		Fuse holder cap	.25
19-249		Coil mounting clip	.05
20-337	L2, 3	R.F. choke coil (2 used)	.25
20-682	L1	F.M. antenna coil	.25
22-3	C3, 5, 11,16,18, 19,21,23, 25,29,32, 34,39,44, 45,66	.01 mfd. ceramic disc - 1 KV (16 used)	.30
22-5	C2,17,30	100 mmf. ceramic disc - 1 KV. (3 used)	.25
22-12	C37	.0015 mfd. ceramic disc - 500 V.	.25
22-14	C22,56, 59	.0047 mfd. ceramic disc - 1 KV. (3 used)	.25
22-16	C33,63	470 mmf. ceramic disc - 1 KV.	.25
22-17	C31,47, 52	.001 mfd. ceramic disc - 1 KV. (3 used)	.25
22-18	C26	.0022 mfd. ceramic disc - 500V.	.25
22-24	C42,43	2 x.0047 mfd. ceramic disc - 1 KV. (2 used)	.40
22-1367	C14	50 mmf. ceramic - 500 V. (used on S-15691)	.45
22-1506	C8	22 mmf. ceramic - 500 V.	.25
22-1612	C54A,B	2x40 mfd. electrolytic - 450 V.	3.50
22-1676	C4,7,13	.001 mfd. ceramic - 500 V. (3 used)	.25
22-1766	C12	.68 mmf. ceramic - 500 V.	.20
22-1852	C1	7.5 mmf. ceramic - 500 V.	.25
22-2309	C40	330 mmf. ceramic - 500 V.	.25
22-2310	C50	560 mmf. ceramic - 500 V.	.25
22-2321	C15	220 mmf. ceramic - 500 V.	.25
22-2373	C28	25 mmf. ceramic - 500 V.	.25
22-2630	C10	19 mmf. ceramic - 500 V. (used on S-15691)	.25
22-2732	C9,24	F.T. capacitor - 1000 mmf. 500 V. (2 used)	.30
22-2781	C61	.01 mfd. 400 V.	
22-2782	C51,53	.1 mfd. paper - 600 V. (2 used)	.45
22-2792	C20,48, 57	.047 mfd. paper - 200 V. (3 used)	.35
22-2794	C46	.047 mfd. paper - 600 V.	.35

Part No.	Dia. No.	Description	Price
22-2795	C35,49	.047 mfd. paper - 200 V. (2 used)	.25
22-2797	C27	.047 mfd. paper - 600 V.	.35
22-2804	C64,65	.022 mfd. paper - 200 V.	.25
22-2807	C41	.022 mfd. paper - 200 V.	.25
22-2819	C38	.0068 mfd. paper - 200 V.	.25
22-2831	C62	.0033 mfd. 200 V.	.30
22-2900	C58,60	F.T. capacitor - 470 mmf. 500 V. (2 used)	.30
22-2905	C55A,B	2x20 mfd. electrolytic - 350 V.	2.25
22-2925	C8A,B, C,D	2 Section variable	3.25
22-2927	C36	56 mmf. ceramic disc - 500 V.	.25
54-139		3/8-32x9/16 palnut (1 mts. ea. 63-3681, 63-3682, 63-3683 & 85-581)	.01
54-271		6-32x1/4 palnut (1 mts. ea. 95-1150, 1250 & 1251)	.01
54-382		Hex nut (used on 62-17)	.06
54-434		Speed nut (2 join S-40392 & 40702)	.01
59-332		Dial pointer	.70
62-17		Fuse receptacle	.40
63-1194	R7	47 K ohm 1 W	
63-1730		47 ohm 1/2 W Ins. 20% (used on 85-583)	.17
63-1744		100 ohm 1/2 W Ins. 20%	.17
63-1758		220 ohm 1/2 W Ins. 20% (7 used)	.17
63-1786		1000 ohm 1/2 W Ins.20%	.17
63-1796		1800 ohm 1/2 W Ins.10%	.17
63-1799		2200 ohm 1/2 W Ins.10%	.17
63-1800		2200 ohm 1/2 W Ins.20%	.17
63-1806		3300 ohm 1/2 W Ins.10% (2 used)	.17
63-1814		4700 ohm 1/2 W Ins.20% (2 used)	.17
63-1827		10 K ohm 1/2 W Ins.10% (3 used)	.17
63-1834		15 K ohm 1/2 W Ins.10%	.17
63-1835		15 K ohm 1/2 W Ins.20%	.17
63-1848		33 K ohm 1/2 W Ins.10% (2 used)	.17
63-1852		39 K ohm 1/2 W Ins.10%	.17
63-1855		47 K ohm 1/2 W Ins.10%	.17
63-1856		47 K ohm 1/2 W Ins.20%	.17
63-1869		100 K ohm 1/2 W Ins.10% (4 used)	.17
63-1870		100 K ohm 1/2 W Ins.20% (3 used)	.17
63-1873		120 K ohm 1/2 W Ins.10%	.17
63-1877		150 K ohm 1/2 W Ins.20%	.17
63-1883		220 K ohm 1/2 W Ins.10% (3 used)	.17
63-1884		220 K ohm 1/2 W Ins.20% (4 used)	.17
63-1887		270 K ohm 1/2 W Ins.10%	.17
63-1890		330 K ohm 1/2 W Ins.10%	.17
63-1898		470 K ohm 1/2 W Ins.20% (2 used)	.17
63-1912		1 Megohm 1/2 W Ins.20%	.17
63-1926		2.2 Megohm 1/2 W Ins.20% (4 used)	.17
63-1940		4.7 Megohm 1/2 W Ins.20% (2 used)	.17
63-1954		10 Megohm 1/2 W Ins.20%	.17
63-1961		15 Megohm 1/2 W Ins.20%	.17
63-3231	R6	220 ohm 2 W Ins.10%	.34
63-3681	R4A,B	Dual tone control	2.75
63-3682	R2	Volume control & switch	2.05
63-3683	R5	Presence control	1.40
63-3692	R3A,B, C,D	Candohm	1.40
63-3694	R1	2000 ohm 7 W Ins.10%	.80
63-3977	R8	Varistor	1.50
73-115		8-32x3/8 slab hd. set screw - cuppoint (2 part of S-40695)	.04
78-351		2 contact socket	.10
78-644		Connector socket	.15
78-755		Octal tube socket (1 mts. ea. 5U4G & 6V6GT)	.20
78-846		9 contact miniature wafer tube socket (mts.12AX7)	.25
78-850		9 contact miniature molded tube socket (mts.12AT7)	.40
78-916		7 contact miniature wafer tube socket (mts. 1, 6BA6 & 1, 6BJ6)	.15
78-953		9 contact miniature wafer tube socket (mts. 6T8)	.25
78-1005		Dial light socket & wire	.60
78-1073		7 contact miniature wafer tube socket (1 mts. 1,6AU6 & 1, 6BA6)	.25
78-1074		5 contact miniature molded tube socket (mts. 1, 6AB4)	.25
78-1075		Dial light socket & wire	.60
78-1076		Pilot light socket & wire (cabinet)	.70
80-209		Dial cord tension spring	.03
80-402		Dial cord tension spring (2 used)	.04
80-444		Tuner arm tension spring	.05
80-780		Tuning core tension spring (2 part of S-22925)	.05
80-1050		Tuner arm stop spring	.10
80-1142		Ground spring	.20
80-1144		Dial cord tension spring	.25
83-2123		Antenna term. strip (FM)	.25
83-2132		1 lug term. strip (2 used)	.05
83-2135		4 lug term. strip	.10
83-2216		7 lug term. strip (2 used)	.15
83-2522		6 lug term. strip	.10
83-2627		2 lug term. strip	.05
83-2639		3 lug term. strip (2 used)	.05
83-2640		4 lug term. strip	.10
83-2641		5 lug term. strip	.10
83-2642		5 lug term. strip	.10
83-2649		2 lug term. strip	.05
83-2715		2 lug term. strip	.05
85-581	S2	Record compensator switch	1.40
85-583	S1	Band switch	4.75
93-2		Brass washer (used on 63-3692)	.01
93-216		Washer	.01
93-1179		Rubber washer (used on 62-17)	.01
93-1180		Lockwasher	.03
94-946		R.F. plate mtg. bushing (4 used)	.03
94-812		Coil insert (part of S-40892)	.05
95-1102	T5	3rd I.F. transformer - 455 Kc.	3.00
95-1150	T1,4	1st & 3rd I.F. transformer - 10.7 Mc.	3.50
95-1153	T6	Discriminator transformer - 10.7 Mc.	3.50
95-1250	T2	1st I.F. transformer - 455 Kc.	3.00
95-1251	T3	2nd I.F. transformer - 10.7 Mc. & 455 Kc.	3.00
95-1538	T7	Power transformer	19.00
95-1539	T8	Audio output transformer	4.00
100-67	PL1,2	Pilot light bulb (2 used)	.15

Part No.	Dia. No.	Description	Price
113-8		6-32x1/4x1/4 hex hd. mach. screw - lockwasher att. (2 used on 22-2925)	.02
113-10		6-32x3/16 hex hd. mach. screw - lockwasher att. (2 used on 85-583 & 4 on 22-2925)	.02
114-39		8-32x1/4x1/4 hex hd. self-tap screw (3 used)	.01
114-201		8-32x5/16x1/4 hex hd. self-tap screw (2 used)	.01
114-292		6-32x5/8x1/4 hex hd. self-tap screw (4 used)	.01
114-297		6-32x1/4x1/4 hex hd. self-tap screw (mts. 12-2054)	.01
114-326		8-32x1/4x1/4 hex hd. self-tap screw (2 used on S-40392)	.02
114-370		10-32x1/2 hex hd. self-tap screw - flat washer att. (4 used on 95-1538)	.05
114-390		8-18x7/16x1/4 hex hd. self-tap screw (joins S-40396 & 126-831)	.03
114-559		8-32x7/16 hex hd. self-tap screw - flat washer att.(2 used on ea. S-40395 & S-40396)	.03
125-17		Rubber grommet (4 used)	.03
125-73		Rubber grommet (1 used on ea. S-15691 & 15743)	.10
125-96		Strain relief grommet	.10
126-622		Tube shield	.20
126-797		Tube shield	.10
126-831		Heat shield	.50
126-835		Pilot light shield	.10
126-859		Band swtich shield	.10
136-36	F1	Fuse - 2 amp.	.10
148-149		Tuner arm (used on 22-2925)	.50
149-64		Iron core & spring (2 used on 22-2925)	.75
149-85		Iron core (part of S-40892)	.10
188-60		Retaining ring (used on S-40601)	.02
188-149		Retaining ring (used on S-40394)	.02
199-213		Shielded paper sleeve	.01
S-15691	L7	F.M. osc. coil assem.	.50
S-15743	L4	F.M. det. coil assem.	.80
S-17159		Drive cord & eyelet assem. (gang)	.10
S-40392		Idler pulley & strip assem.	.75
S-40394		Pulley & shaft assem.	.50
S-40395		Dial brkt. assem. (left)	.35
S-40396		Dial brkt. assem.(right)	.35
S-40601		Tuning shaft & pulley assem.	.50
S-40695		Bushing, cam & pulley assem.(used on 22-2925)	1.25
S-40892	L8	BC osc. coil assem.	1.00
S-41258		Drive cord & eyelet assem. - pointer	.15
S-41306		Drive cord & eyelet assem. - idler	.15
S-41956		Dial scale & background strip assem.	

CABINET PARTS FOR MODELS A-HF1183E, B-HF1185R, C-HF1185M, D-HF1284, E-HF1284E F-HF1284-Y, G-HF1284G, H-HF1284L, I-HF1286R

Part No.	Code	Description	Price
2-529	A	Cabinet back	2.00
2-530	D,E,G,H & I	Cabinet back	2.50
2-546	F	Cabinet back	2.50
11-120	D,E,F,G, H & I	Line cord, socket & plug	1.25
14-2122	D	Console combination cab.	
14-2122E	E	Console combination cab.	
14-2122G	G	Console combination cab.	
14-2122L	H	Console combination cab.	
14-2122Y	F	Console combination cab.	
14-2125E	A	Console combination cab.	
14-2300M	C	Console combination cab.	
14-2300R	B	Console combination cab.	
14-2310R	I	Console combination cab.	
15-111	D,E,F,G, H & I	Socket shell (part of S-20386)	.20
16-1284	D,E,F,G, H & I	Packing carton	
16-1337	A	Packing carton	
16-1382	B,C	Packing carton	
19-9	A,B,C,D, E,F,G,H, & I	Line cord retaining clip	.05
19-169	D,E,F,G, H & I	Record chgr. mtg. clip (2 used)	.10
19-298	A,B,C,D, E,F,G,H, & I	Mtg. clip	.20
36-80	D,E,F,G, H & I	Record chgr. handle	.75
40-158	D,H & I	Knife hinge - R.H. (part of 14-2122 & L)	.60
40-159	E	Knife hinge - R.H. (part of 14-2122E)	.60
40-160	D,H & I	Knife hinge - L.H. (part of 14-2122 & L)	.60
40-161	E	Knife hinge - L.H. (part of 14-2122E)	.60
40-162	F	Knife hinge - L.H. (part of 14-2122Y)	.60
40-163	F	Knife hinge - R.H. (part of 14-2122Y)	.60
40-185	B,C	Support hinge	2.25
40-186	A	Support hinge	2.25
40-194	B,C	Lid support reinforcing hinge	.60
40-195	B,C	Lid hinge	.60
40-196	A	Lid support reinforcing hinge (part of 14-2125E)	.60
40-197	A	Lid hinge (part of 14-2125E)	.60
46-1097	B,C,& I	Key escutcheon (2 used on 14-2300R)	1.00
46-1357	D,E,G,H & I	Knob (radio-phono-record compensator - loudness - presence)	.50
46-1639	A,B,C,D, E,F,G,H, & I	Tuning knob	.50
46-1640	A,B,C	Tone control knob - bass	.50
46-1642	D,E,G,H & I	Tone control knob - treble	.50

Part No.	Code	Description	Price
46-1686	D,E,F,G, H & I	Tone control knob - bass	.50
46-1805	D,E,F,G & H	Door pull (part of cab.)	.50
46-1828	A,B,C	Knob (phono-radio-record compensator - loudness-presence)	.50
46-1829	A,B,C	Tone control knob - treble	.50
46-1862	B,C	Key escutcheon (2 used on 14-2300M)	1.00
46-1866	F	Knob (radio-phono-record compensator-loudness-presence)	.50
46-1867	F	Tone control knob - treble.	50
49-802	A,B,C, D,E,F,G, H & I	12" PM speaker (2 used)	15.00
52-653	D,E,F,G, H & I	Shielded lead (part of S-20386)	.90
54-10	A,B,C,D, E,F,G,H & I	8-32x1/4 hex nut	.02
54-30	D,E,F,G, H & I	8-32x5/16x7/64 hex nut (4 mt. ea. 49-802)	.01
54-254	A,B,C,D, E,F,G,H & I	Speed nut - tinnerman	.02
54-368	D,E,F,G, H & I	Tee nut (7 part of cab.)	.10
54-424	A,B,C	8-32x11/32 hex palnut (8 used)	.02
54-435	D,G	Capped tee nut	
54-436	E,H	Capped tee nut	
54-447	F	Capped tee nut	
57-1270	E,G	Strike plate	.05
57-1284	D,H,I	Strike plate	.05
57-2273	A,B,C,D, E,F,G,H & I	Nameplate - Hi-Fidelity	.30
57-2280	A,B,C,D, E,F,G,H & I	Nameplate - Zenith	.15
57-2288	D,E,F,G, H & I	Radio dial escutcheon	2.50
57-2302	D,E,F,G, H & I	Control panel	3.00
57-2400	A,B,C	Radio dial escutcheon	4.00
57-2402	A,B,C	Control panel	3.00
57-2431	F	Strike plate	
58-214	D,E,F,G, H & I	1 prong plug (part of S-20386)	.10
70-163	D,E,F,G, H & I	8x2 1/4 rd. hd. wood screw	.05
70-179	D,E,F,G, H & I	8x1 1/4 rd. hd. wood screw	
72-74	D,E,F,G, H & I	4x3/8 phils. flat hd. wood screw (4 used on 57-2302)	.02
72-102	D,E,F,G, H & I	6x1/2 phils. flat hd. wood screw	.02
72-136	A,B,C	4x3/8 phils. flat hd. wood screw (4 used)	.04
78-978	D,E,F, G,H & I	3 contact socket	.15
80-893	D,E,F,G, H & I	Record chgr. mtg. spring (2 used)	.10
80-1070	D,E,F,G, H & I	Record chgr. mtg. spring (2 used)	.10
83-765	A,B,C,D, E,F,G,H & I	Armite strip	.02
83-1977	D,E,F,G, H & I	Record chgr. shipping strip	.01
83-1994	D,E,F,G, H & I	Shipping strip (6 used)	.05
83-2349	I	Tone arm shipping strip	
83-2535	A,B,C	Phono shipping strip (2 used)	.02
83-2657	A,B,C,D, E,F,G,H & I	Pilot light socket mtg. strip	.10
83-2762	A,B,C	Phono shipping strip	.15
86-30	A,B,C,D, E,F,G,H & I	Terminal	.02
86-2[illegible]	A,B,C,D, E,F,G,H & I	Terminal (4 used on S-24381)	.02
86-254	A,B,C,D, E,F,G,H & I	Terminal	.05
86-255	A,B,C,D E,F,G,H & I	Spade terminal	.02
90-367	A,B,C,D E,F,G,H & I	Pilot light tube	.05
93-478	D,E,F,G, H & I	1/32x13/64x3/4 steel washer	
93-842	D,E,F,G, H & I	.062x.187x9/16 washer (4 used on ea. 49-802)	.02
93-1105	D,E,F,G, H & I	Turntable shipping washer	
93-1260	A,B,C	Fibre washer	.03
96-113	D	Cabinet leg (4 part of 14-2122)	
96-114	E	Cabinet leg (4 part of 14-2122E)	
96-149	F	Cabinet leg (4 part of 14-2122Y)	
96-150	G	Cabinet leg (4 part of 14-2122G)	
96-151	H	Cabinet leg (4 part of 14-2122L)	
100-189	A,B,C,D, E,F,G,H & I	Dial light bulb	.15
102-2253	A,B,C	Decal - Hi-Fidelity	.15
102-3464	B,C	Dia. Cartridge Label	
112-789	A,B,C	8-32x1 3/8 swedged hd. mach. screw	.02
112-846	D,E,F,G, H & I	8-15x3/8 phils. pan hd. self-tap screw (4 used)	.03
112-851	D,E,F,G, H & I	Record chgr. mtg. screw (3 used)	.10
112-954	D,E,F,G, H & I	8-32x3/4 swedged hd. mach. screw (8 used)	.05
112-1038	A,B,C	Record chgr. mtg.screw	.15
113-36	D,E,F,G, H & I	8-32x3/8 hex hd. mach. screw lockwasher att. (2 used)	.03
114-39	A,B,C,D, E,F,G,H & I	8-32x1/4x1/4 hex hd. self-tap screw (6 used)	.01
114-329	A,B,C,D, E,F,G,H & I	6-18x3/8x1/4 hex hd. self-tap screw (6 used)	.02
114-386	A,B,C,D, E,F,G,H & I	Chassis mtg. screw (4 used)	.10
114-453	A,B,C,D, E,F,G,H & I	6-18x5/8 hex slot hd. self-tap screw - flat washer att.	.10
114-522	A,B,C,D, E,F,G,H & I	5-20x1/2x1/4 hex hd. self-tap screw	.02
114-562	D,E,F,G, H & I	6-18x1 1/2x1/4 hex hd. self-tap screw (2 used)	.02
125-61	D,E,F,G, H & I	Rubber grommet	.03

Part No.	Code	Description	Price
126-739	D,E,F,G, H & I	Heat shield	.10
138-141	A	Cabinet grille (part of 14-2125E)	5.50
138-165	I	Metal grille (part of 14-2310R)	
142-76	D,E,F,G, H & I	Dual pickup cartridge (Diamond-Sapphire)	22.50
142-83	A,B,C	Dual pickup cartridge (Diamond-Sapphire)	21.50
152-252	D	Stop block	.50
152-257	F,G,H,I	Stop block	.70
152-258	E	Stop block	.70
156-33	E,F	Bullet catch (2 part of 14-2122E & Y)	.05
156-35	D,H,I	Bullet catch (2 part of 14-2122 & L)	.05
159-90	A	Plug button (2 used)	.15
159-91	B,C	Plug button (2 used)	.10
165-14	A,B,C	Cabinet glide	.05
166-55	D,I	Tack bumper	.03
166-57	E,H	Tack bumper	.05
166-73	F	Tack bumper	.03
166-101	G	Tack bumper	
171-7	D,E,F,G, H & I	Pilot light lens	.25
171-16	A,B,C	Pilot light lens	.25
188-54	A,B,C,D, E,F,G,H & I	Knob clamping ring (2 used)	.02
188-195	A,B,C	Retaining ring	.03
192-229	A,B,C,D E,F,G,H & I	Dial crystal	1.50
199-150	D,E,F,G H & I	Paper sleeve	.02
202-697	A,B,C,D, E,F,G,H & I	FM Instruction Book	.10
202-1242	D,E,F,G, & H	Radio-phono instruction book	.75
202-1280	A,B,C	Instruction book	.60
202-1320	I	Radio-phono instruction book	.60
S-14078	A	4 Speed record changer	
S-14080	D,E,F,G H & I	Variable speed record changer	
S-14084	B,C	4 Speed record changer	
S-17060	D,E,F,G H & I	Wire & terminal assem.	.15
S-17473	A,B,C	Terminal & wire assem. (FM)	.20
S-18560	D,E,F,G, H & I	Record chgr. slide assem.	2.75
S-20386	D,E,F,G, H & I	Shielded lead & plug assem.	1.40
S-22006	D,E,F,G, H & I	45 RPM record adapter assem.	5.00
S-23829	A,B,C,D, E,F,G,H	Tweeter speaker assem. (2 used)	1.10
S-24228	D,E,F,G, H & I	Wire & terminal assem.	.30
S-24381	A,B,C,D, E,F,G,H	Speaker lead & terminal assem.	.40
S-40795	A,B,C,D, E,F,G,H & I	Antenna assem.	1.25
S-40799	A,B,C,D, E,F,G,H & I	Chassis bottom plate & spring assem.	1.50
S-41437	A,B,C	45 RPM record adapter assem.	2.95
S-41623	A,B,C	Cartridge holder assem.	1.00
S-42566	D,E,F,G, H & I	Record chgr. mtg. frame assem.	

12Z21 CHASSIS PARTS

Part No.	Dia. No.	Description	Price
12-2054		Pulley support brkt.	.20
12-2386		Band switch support brkt. (part of 85-585)	.20
12-2411		Tuning capacitor mtg. brkt.	
12-2443		Band switch support brkt. (part of 85-585)	.20
19-249		Coil mtg. clip (2 used)	.05
20-355	L3	FM antenna coil	.20
22-3	C8,9,17, 24,26,27, 28,30,32, 34,43,56	.01 mfd. ceramic disc - 1 KV. (12 used)	.30
22-5	C15,33	100 mmf. ceramic disc - 1 KV. (2 used)	.25
22-12	C54	.0015 mfd. ceramic disc - 500 V.	.25
22-14	C25,53	.0047 mfd. ceramic disc - 1 KV. (2 used)	.25
22-16	C36	470 mmf. ceramic disc - 800 V.	.25
22-17	C35	.001 mfd. ceramic disc - 1 KV.	.25
22-18	C29,41	.0022 mfd. ceramic disc - 500 V. (2 used)	.25
22-1367	C19,23	50 mmf. ceramic - 500 V. (2 used)	.45
22-1506	C12	22 mmf. ceramic - 500 V.	.25
22-1669	C13	100 mmf. ceramic-500 V.	.25
22-1676	C10,22	.001 mfd. ceramic-500 V. (2 used)	.25
22-1761		50 mmf. ceramic - 500 V.	.25
22-1766	C18	.68 mmf.ceramic - 500 V.	.20
22-1852	C6	7.5 mmf.ceramic - 500 V.	.25
22-2321	C4,14	220 mmf. ceramic-500 V. (2 used)	.25
22-2373	C31	25 mmf. ceramic disc - 500 V.	.25
22-2630	C20	19 mmf. ceramic - 500 V.	.25
22-2670	C51,52	.0033 mfd. ceramic disc - 500 V. (2 used)	.25
22-2686	C45A,B	20-40 mfd. electrolytic - 450 V.	3.00
22-2732	C3,11,16, 21	F.T. capacitor .001 mfd.- 500 V. (2 used)	.30
22-2782	C50,55	.1 mfd. paper - 600 V. (2 used)	.45
22-2792	C2,5	.047 mfd. paper - 200 V. (2 used)	.30
22-2795	C38	.047 mfd. paper - 200 V.	.25
22-2797	C37	.047 mfd. paper - 600 V.	.35
22-2804	C39	.022 mfd. paper - 200 V.	.25
22-2807	C40,48, 49	.022 mfd. paper - 200 V. (3 used)	.25

Part No.	Dia. No.	Description	Price
22-2813	C44,47	.01 mfd. paper - 200 V.	.25
22-2875	C42,46	150 mmf. ceramic disc	.25
22-2901	C57	680 mmf. - 500 V.	
22-2927	C7	56 mmf. ceramic disc	.25
22-2944	C1A,B,C, D,E,F	3 section variable	4.25
54-139		3/8-32x9/16 palnut (1 mts. ea. 63-3978,3979,3980 & 85-586)	.01
54-271		6-32x1/4 palnut (1 mts. ea. 95-1102,1150,1151,1153 & S-41811)	.01
54-434		Speed nut (2 mt. S-40766)	.01
58-220		11 prong plug	.55
59-333		Dial pointer	.75
63-1194	R5	47 K ohm 1 W Ins. 10%	.25
63-1719		27 ohm 1/2 W Ins. 10%	.17
63-1723		33 ohm 1/2 W Ins. 20%	.17
63-1730		47 ohm 1/2 W Ins. 20%	.17
63-1743		100 ohm 1/2 W Ins. 10% (2 used)	.17
63-1744		100 ohm 1/2 W Ins. 20%	.17
63-1758		220 ohm 1/2 W Ins. 20% (4 used)	.17
63-1772		470 ohm 1/2 W Ins. 20%	.17
63-1778		680 ohm 1/2 W Ins. 10%	.17
63-1779		680 ohm 1/2 W Ins. 20%	.17
63-1785		1000 ohm 1/2 W Ins. 10%	.17
63-1786		1000 ohm 1/2 W Ins. 20%	.17
63-1796		1800 ohm 1/2 W Ins. 10%	.17
63-1800		2200 ohm 1/2 W Ins. 20%	.17
63-1820		6800 ohm 1/2 W Ins. 10%	.17
63-1827		10 K ohm 1/2 W Ins. 10% (3 used)	.17
63-1835		15 K ohm 1/2 W Ins. 20%	.17
63-1841		22 K ohm 1/2 W Ins. 10%	.17
63-1848		33 K ohm 1/2 W Ins. 10%	.17
63-1855		47 K ohm 1/2 W Ins. 10% (2 used)	.17
63-1856		47 K ohm 1/2 W Ins. 20%	.17
63-1869		100 K ohm 1/2 W Ins.10% (5 used)	.17
63-1870		100 K ohm 1/2 W Ins.20% (3 used)	.17
63-1880		180 K ohm 1/2 W Ins.10%	.17
63-1883		220 K ohm 1/2 W Ins.10%	.17
63-1884		220 K ohm 1/2 W Ins.20% (2 used)	.17
63-1887		270 K ohm 1/2 W Ins.10%	.17
63-1890		330 K ohm 1/2 W Ins.10%	.17
63-1912		1 Megohm 1/2 W Ins. 20%	.17
63-1926		2.2 Megohm 1/2 W Ins.20% (3 used)	.17
63-1940		4.7 Megohm 1/2 W Ins.20% (2 used)	.17
63-1947		6.8 Megohm 1/2 W Ins.20%	.17
63-1961		15 Megohm 1/2 W Ins. 20%	.17
63-3974	R1A,B	Candohm	1.50
63-3977	R6	Varistor	1.50
63-3978	R3	Presence control	1.40
63-3979	R4	Volume control & switch	2.05
63-3980	R2A,B,C	Treble & bass tone control	3.50
73-115		8-32x3/8 slab hd. set screw - cuppoint (2 part of S-40695)	.04
78-644		Connector socket (2 used)	.15
78-755		Octal tube socket	.20
78-850		9 contact miniature molded tube socket (2 used)	.40
78-869		9 contact miniature wafer tube socket	.25
78-916		7 contact miniature wafer tube socket	.15
78-1073		7 contact miniature wafer tube socket (3 used)	.25
78-1086		Dial light socket & wire (2 used)	.30
80-209		Drive cord spring	.03
80-402		Drive cord spring	.04
80-444		Tuner arm tension spring	.05
80-780		Iron core tension spring (1 used on ea. 149-64)	.05
80-1050		Tuner arm stop spring	.10
80-1142		Ground spring	.20
80-1144		Drive cord spring	.25
83-1884		Antenna terminal strip	.30
83-2135		4 lug terminal strip	.10
83-2216		7 lug terminal strip (2 used)	.15
83-2612		2 lug terminal strip	.05
83-2628		1 lug terminal strip	.05
83-2638		3 lug terminal strip	.05
83-2649		2 lug terminal strip (2 used)	.05
83-2673		6 lug terminal strip	
83-2712		Loop terminal strip	.20
85-585	S1	Band switch	5.25
85-586	S2	Compensator switch	2.00
93-2		Brass washer (used on 63-3974)	.01
93-216		.015 x.255x7/16 steel washer	.01
94-773		Coil form insert (part of S-41087)	.10
94-812		Coil form insert (part of S-41088)	.05
94-946		R.F. plate mtg. bushing (4 used)	.03
94-949		Spacer bushing (2 used on S-40766)	.03
95-1102	T5	3rd I.F. transformer - 455 KC.	3.00
95-1150	T1,4	1st & 3rd I.F. transformer - 10.7 Mc.	3.50
95-1153	T6	Discriminator transformer - 10.7 Mc.	3.50
95-1251	T3	2nd I.F. transformer - 10.7 Mc. & 455 KC.	3.00
95-1549	T2	1st I.F. transformer - 455 KC.	1.50
100-67	PL1,2	Dial light bulb - 47 (2 used)	.15
113-8		6-32x1/4x1/4 hex.hd.mach. screw - lockwasher att. (2 used on 85-585)	.02
113-10		6-32x3/16x1/4 hex hd. mach. screw - lockwasher att. (4 used on 22-2944)	.02
114-39		8-32x1/4x1/4 hex hd. self-tap screw (1 used on ea. S-40395 & 40396)	.01
114-200		6-32x5/16x1/4 hex hd. self-tap screw (2 used 22-2944)	.01
114-292		6-32x5/8x1/4 hex hd. self-tap screw (4 used)	.01
114-297		6-32x1/4x1/4 hex hd. self-tap screw (1 mts. 12-2054 & 2 mt. 58-220)	.01
114-342		6-20x3/16x1/4 hex hd. self-tap screw (used on S-41811)	.02
114-460		8-32x5/8x1/4 hex hd. slot. self-tap screw (2 used on S-40392)	.05
114-551		8-32x7/16x1/4 hex hd. self-tap screw (4 used on S-40766)	.02
125-17		Rubber grommet (4 used)	.03
125-73		Rubber grommet (1 used on ea. S-15691 & 15743)	.10
126-797		Miniature tube shield (covers 12AT7)	.10

Part No.	Dia. No.	Description	Price
126-859		Pilot light shield (2 used)	.10
148-149		Tuner arm (used on 22-2944)	.50
149-64		Iron core & spring (used on 148-149)	.60
149-85		Iron core (1 part of ea. S-41087 & 41088)	.10
188-60		Retaining ring (used on S-40601)	.02
188-149		Retaining ring (used on S-40394)	.02
S-15691	L7	FM osc. coil assem.	.50
S-15743	L4	FM det. coil assem.	.80
S-18812		Loop loading coil assem.	.80
S-40392		Idler pulley & strip assem.	.75
S-40394		Pulley & shaft assem.	.50
S-40395		Dial brkt. assem.-left	.35
63-4042	R4	500 K V.C. (front) 1 Meg. V.C. (rear)	
S-40396		Dial brkt. assem.-right	.35
S-40601		Tuning shaft & pulley assem.	.50
S-40695		Bushing, cam & pulley assem.	1.25
S-40766		Dial scale & background strip assem.	3.50
S-41087	L6	BC osc. coil assem.	1.00
S-41088	L5	BC det. coil assem.	1.00
S-41258		Drive cord & eyelet assem.-pointer	.15
S-41306		Drive cord & eyelet assem. - idler	.15
S-41382		Drive cord & eyelet assem. - gang	.10
S-41811		Shield cover, braid & lug assem.	
S-41812		Osc. shield & term. strip	

12Z21 POWER SUPPLY PARTS

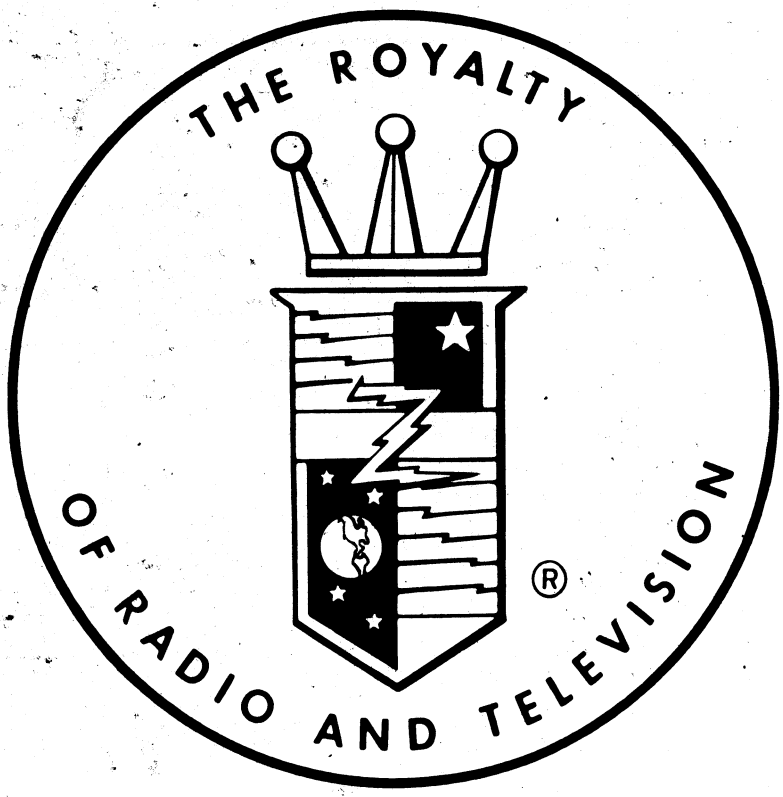
Part No.	Dia. No.	Description	Price
11-106		Line cord & plug	1.00
15-63		Plug cap & insulator (used on 78-987)	.30
15-115		Fuse receptacle cap	.25
22-2569	C2	.047 mfd. molded - 600 V.	.40
22-2580	C3	100 mfd. electrolytic - 50 V.	1.90
22-2581	C6A,B	2 x 40 mfd. electrolytic - 475 V.	430
22-2782	C1	.1 mfd. paper - 600 V.	.45
22-2945	C4,5	3 mfd. electrolytic - 30V. (2 used)	1.25
52-652		Shielded lead	.85
54-382		Fuse receptacle nut	.06
62-17		Fuse receptacle	.40
63-1810		3900 ohm 1/2 W Ins.10%	.17
63-1817		5600 ohm 1/2 W Ins.10%	.17
63-1855		47 K ohm 1/2 W Ins.10%	.17
63-1883		220 K ohm 1/2W Ins.10%	.17
63-1894		390 K ohm 1/2W Ins.10%	.17
63-1897		470 K ohm 1/2W Ins. 10%	.17
63-1898		470 K ohm 1/2W Ins.20%	.17
63-3211	R1	180 ohm 4W WW 10%	.65
63-3981	R2A,B	Candohm	1.25
63-3982	R3	1.0 ohm 3W WW 10%	.45
78-351		2 contact socket	.10
78-755		Octal tube socket (1 mts. ea. 6L6G & 5U4GB)	.20
78-806		7 contact miniature wafer tube socket (mts. 6C4)	.15
78-897		2 contact socket	.10
78-987		11 contact socket (used with 52-652)	.75
83-2257		Special term. strip	.15
83-2307		4 lug terminal strip	.10
83-2627		2 lug term. strip	.05
83-2687		2 lug term. strip	.05
93-2		.016x .134x1/4 brass washer (used on 63-3981)	.01
93-1179		Rubber washer (used on 62-17)	.01
93-1180		Lockwasher (used on 62-17)	.03
95-1394	T2	Power transformer	24.00
95-1395	T1	Output transformer	15.00
114-199		6-32x3/16x1/4 hex hd. self-tap screw (used on 22-2580)	.01
114-365		8-32x3/8 hex hd. self-tap screw - flat washer att. (4 mt. 95-1395)	.05
114-370		10-32x1/2 hex hd. self-tap screw - flat washer att. (4 mt. 95-1394)	.05
125-96		Strain relief grommet	.10
136-31	F1	Fuse - 4 amp. - 3AG	.25
199-213		Shielded paper sleeve	.01
237-1		Cable retaining clip	.02

CABINET PARTS FOR MODELS A-HF1290H, B-HF1290R, C-HF1292, D-HF1292E

Part No.	Code	Description	Price
2-514	B	Cabinet back	1.75
2-515	A	Cabinet back	1.75
2-544	C	Cabinet back	1.75
2-545	D	Cabinet back	1.75
11-120	A,B,C,D	Line cord, socket & plug	1.25
14-2123H	A	Console combination cabinet	
14-2123R	B	Console combination cabinet	
14-2305	C	Console combination cabinet	
14-2305E	D	Console combination cabinet	
15-111	A,B,C,D	Socket shell (part of S-20629)	.20
16-1288	A,B	Packing carton	
16-1385	C,D	Packing carton	
19-9	A,B,C,D	Line cord clip	.05
19-169	A,B,C,D	Record chgr. mtg. clip	

Part No.	Code	Description	Price
19-210	A,B,C,D	Loop connector clip (2 part of S-17917)	.05
19-298	A,B,C,D	Mtg. clip (mts. S-22006)	.20
36-80	A,B,C,D	Record chgr. handle	.75
40-158	A,B	Knife hinge (R.H.) (2 part of cabinet)	.60
40-159	D	Knife hinge (R.H.) (2 part of 14-2305E)	.60
40-160	A,B	Knife hinge (L.H.) (2 part of cabinet)	.60
40-161	D	Knife hinge (L.H.) (2 part of 14-2305E)	.60
46-1020	B	Knob (bandswitch - record compensator - loudness - treble)	.50
46-1229	A,B,C,D	Hand pull (part of cab.)	.50
46-1357	A,C,D	Knob (bandswitch - record compensator - loudness - treble)	.50
46-1639	A,B,C,D	Tuning control knob	.50
46-1641	B	Tone control knob - bass	.50
46-1642	A,C,D	Tone control knob - bass	.50
46-1686	A,B,C,D	Presence control knob	.50
49-759	A,B,C,D	3 1/2" PM speaker (2 used)	6.00
49-816	A,B,C,D	7 1/2" PM speaker	9.00
49-817	A,B,C,D	12" PM speaker	
52-665	A,B,C,D	Shielded lead (part of S-20629)	1.10
54-10	A,B,C,D	8-32x1/4 hex nut (8 part of cab.)	.02
54-30	A,B,C,D	8-32x5/16x7/64 hex nut (4 mt. ea. 49-816 & 817)	.01
54-254	A,B,C,D	Tinnerman speed nut (5 part of cab.)	.02
54-368	A,B,C,D	Tee nut	.10
54-385	A,B,C,D	6 32x5/16 hex nut (2 mt. ea. 49-759 & 4 part of cab.)	.02
54-435	D	Capped tee nut (part of 14-2305E)	
54-436	C	Capped tee nut (part of 14-2305)	
57-1270	D	Strike plate (2 part of 14-2305E)	.05
57-1284	A,B	Strike plate (4 part of cab.)	.05
57-2273	A,B,C,D	Nameplate (Hi-Fi) (part of cab.)	.30
57-2280	A,B,C,D	Nameplate (Zenith) (part of cab.)	.15
57-2288	A,B,C,D	Radio dial escutcheon	2.50
57-2344	A,B,C,D	Control panel	3.00
58-193	A,B,C,D	2 prong plug (part of 78-1017)	.15
58-214	A,B,C,D	1 prong plug (part of S-20629)	.10
70-163	A,B,C,D	8x2 1/4 rd. hd. wood screw (used on S-14086)	.05
70-179	A,B,C,D	8x1 1/4 rd. hd. wood screw (2 used on S-42566)	.03
72-74	A,B,C,D	4x3/8 phils. flat hd. wood screw (4 used on 57-2344)	.02
72-102	A,B,C,D	6x1/2 phils. flat hd. wood screw (3 mt. ea. S-18560)	.02
72-127	A,B,C,D	8x1 1/4 phils. flat hd. wood screw (4 part of and 8 used on cab.)	.05
74-89	A,B,C,D	Ventilating screen	.25
78-978	A,B,C,D	3 contact socket (part of S-20629)	.15
78-1003	C,D	Pilot light socket & wire	1.00
78-1017	A,B	Pilot light socket & wire	1.20
80-893	A,B,C,D	Record chgr. mtg. spring (2 used)	.10
80-1070	A,B,C,D	Record chgr. mtg. spring (2 used)	.10
83-765	A,B,C,D	Armite strip (6 used)	.02
83-1475	A,B,C,D	Loop fastening strip (12 used)	.01
83-1977	A,B,C,D	Record chgr. shipping strip	.01
83-1994	A,B,C,D	Shipping strip (6 used)	.05
83-2425	A,B,C,D	Chassis mtg. strip (2 used)	.05
83-2657	A,B,C,D	Pilot light socket mtg. strip	.06
83-2690	A,B,C,D	Acoustical strip (2 used)	.75
83-2691	A,B,C,D	Acoustical strip (2 used)	1.00
83-2806	A,B	Spkr. term. strip	.15
86-30	A,B,C,D	Terminal (part of S-17473)	.02
86-237	A,B,C,D	Terminal	.02
86-254	A,B,C,D	Terminal (4 used)	.05
86-255	A,B,C,D	Spade term. (part of S-17473)	.02
90-367	A,B,C,D	Pilot light tube	.05
93-168	A,B,C,D	Rubber shoulder washer (4 used on chassis)	.10
93-478	A,B,C,D	1/32x13/64x3/4 steel washer (used on S-14086)	.02
93-965	A,B,C,D	Rubber washer (4 used on chassis)	.02
93-1105	A,B,C,D	Turntable shipping washer	.06
96-113	C	Cabinet leg (4 part of 14-2305)	
96-114	D	Cabinet leg (4 part of 14-2305E)	
100-189	A,B,C,D	Pilot light bulb	.15
112-846	A,B,C,D	8-15x3/8 phils. pan hd. self-tap screw (4 join S 18560 & S-42566)	.03
112-851	A,B,C,D	Record chgr. mtg. screw (3 used)	.10
112-942	A,B,C,D	6-32x1 3/8 swedge hd. mach. screw (4 part of cab.)	.05
112-954	A,B,C,D	8-32x1 3/4 swedge hd. mach. screw (8 part of cab.)	.05
113-36	A,B,C,D	8-32x3/8 hex hd. mach. screw - lockwasher att. (2 used on 36-80)	.03
114-39	A,B,C,D	8-32x1/4x1/4 hex hd. self-tap screw (6 mt. S-40799)	.01
114-329	A,B,C,D	6-18x3/8x1/4 hex hd. self-tap screw (1 used on ea. 19-9, 83-2657 & 2806)	.02
114-453	A,B,C,D	6-18x5/8 hex slot. hd. self-tap screw - flat washer att. (8 mt. 2-514 & 515)	.10
114-513	A,B,C,D	Chassis mtg. screw (4 mt. ea. chassis)	.10
114-522	A,B,C,D	5-20 x 1/2 hex hd. self-tap screw	.02
114-562	A,B,C,D	6-18x1 1/2x1/4 hex hd. self-tap screw (2 mt. 152-257)	.02
125-61	A,B,C,D	Rubber grommet (part of S-20629)	.03
126-761	A,B,C,D	Heat shield	.10
142-76	A,B,C,D	Dual pickup cartridge (Diamond-Sapphire)	22.50
152-254	B,C,D	Stop block	.60
152-255	A	Stop block	.60
156-33	D	Bullet catch (2 part of 14-2305E)	.05
156-35	A,B	Bullet catch (4 part of cab.)	.05
165-21	A,B	Cabinet caster (4 part of cab.)	.55
166-55	A,B	Tack bumper (2 part of cab.)	.03
171-7	A,B,C,D	Pilot light lens	.25
188-54	A,B,C,D	Knob clamping ring	

Part No.	Code	Description	Price
192-229	A,B,C,D	Dial crystal	1.50
199-150	A,B,C,D	Paper sleeve	.02
202-697	A,B,C,D	FM instruction book	.10
202-1245	C,D	Radio-phono instruction book	.75
202-1331	A,B	Radio-phono instruction book	
S-14086	A,B,C,D	Variable speed record changer	
S-17325	A,B,C,D	Low impedance loop assem. (part of S-17917)	.40
S-17473	A,B,C,D	Wire & term. assem. (FM ant.)	.20
S-17917	A,B,C,D	Low impedance loop, clip & strip assem.	.60
S-18560	A,B,C,D	Record chgr. slide assem. (2 used)	2.75
S-18812	A,B,C,D	Loop loading coil assem.	.80
S-20629	A,B,C,D	Shielded lead & plug assem.	1.70
S-22006	A,B,C,D	45 R.P.M. record adapter	5.00
S-40799	A,B,C,D	Chassis bottom plate & spring assem.	1.50
S-42566	A,B,C,D	Record chgr. mtg. frame assem.	



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